by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Much of the videogame industry is based around a model of technological progress, whereby developers, individual videogames, and videogame platforms are lauded as superior based on their engagement with the latest, cutting edge forms of technology. As a direct consequence of this focus, sophisticated graphic-based representations are often employed as a yardstick for technological superiority, as it is a form of advancement that can be discerned by the naked eye. The focus on graphics has a number of consequences: it presents past videogames as inferior realizations that pale before more modern approaches; it favors image-based representation over other representational forms such as text; it enters videogames into a broader, ongoing debate in Western culture regarding mimesis and representations of reality that pit image and text against each other.

An alternative to the graphic-dominated history of videogames is a variantological approach, in which marginalized and past forms of representation are not seen as dead ends and failures, but as variants that offer alternative perspectives. To that end, this dissertation analyzes five different text-based variant approaches that present ways of considering videogames apart from the dominant narrative of technology-driven graphical realism. First, the history of the instruction manual illustrates how a text-based paratext functions in regards to videogames, which can be viewed as reinforcing the technology-driven approach to videogames—up to and including technology rendering the manual defunct—but can also illustrate a second history, one which explores how a manual as paratext acts to support videogames through incorporation of other print media forms such as the comic book or the picturebook, through presenting a model of the ideal gamer, and through presenting the manual itself as an object from within the videogame.

Second, in the history of videogame technology, the 1980s are a crucial period, in which console systems developed an image-based vocabulary for nascent players to learn, and the text-based videogames of the personal computer looked to literary models to do what the image-based games

cease to be competing forms and turn into formations more complementary. Third, in the 1990s, this balance shifts towards image with the advent of 3D immersive graphics, and the dominance of graphic-based realism, as illustrated through *DOOM* and *Myst*—though both games not only used text, but depended on it to engage players to enter into make-believe, mimetic games with their respective gameworlds. In the face of graphical realism's dominance, the 1999 computer game *Planescape:*Torment stands out as a text-heavy variant, illustrating the ability of textual representation to engage with mimesis-as-make-believe and offer an alternative to graphical realism through self-inscription, the presentation of text, and a gameworld based on the power of belief and words. Finally, a fifth approach to textual variants comes through a consideration of the role of the text-centred artifact the book within videogames, which presents a wide variety of uses including the book as epitext, book as narrative frame, book as menu system, book as found object, and book as allusive structure.

Acknowledgments

If the saying is that it takes a village to raise a child, then it takes a department (and more) to write a dissertation. I have had an immeasurable amount of support in composing this dissertation, and whatever credit it deserves must in part go to them as well, and if there is anyone whose name is omitted here, the fault is all mine.

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Thanks also goes out to the department, for being open to students who wish to expand in areas

where the connection to traditional English studies may not always be apparent; there are very few English departments in Canada, if any, where I could have pursued similar research, and I'm grateful to have had the opportunity to do that research here at Waterloo. I've received so much guidance and support from my fellow graduate students here that it would be impossible to list them all, but, well, I'm still going to make the attempt: everyone I've worked with at *First Person Scholar*—both the new folk, Emma Vossen, Betsy Brey, Alex Orlando, Chris Lawrence, Elise Vist, Judy Ehrentraut, Meghan Blythe-Adams and my fellow founders, Jason Hawreliak, Kent Aardse, and, most of all, our editor-inchief and friend Stephen Wilcox. And thanks also to our faculty advisors, Gerald Voorhees, Neil Randall, and Jennifer Whitson. More thanks to general friends and colleagues in the department and beyond, studying digital media or doing other fun things: Ryan Tully, Nike Abbott, Danielle Stock, Sarah Gibbons, Adam Cilevitz, Lauren Burr, Islai Cote, Christine Horton, Charlotte Clarke, and all of the others I've failed to mention, but whose discussions and efforts have made a difference nonetheless.

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Dedication

I dedicate this dissertation to what inspired it, Kiyoshi Shigematsu's "A Thousand Years of Dreams"-even if it turned out not to fit as a main focus in what follows, it was an example that pushed me on,
and continues to do so.

Human beings, who cannot live forever, daring to take a journey without end.

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Introduction

The selling point for the 1994 ESPN Sunday Night NFL was its graphics, particularly the way its graphics allowed a greater realism through the omission of a passing window utilized by a rival franchise; instead, the player had the scope to view the entire field. A magazine advertisement makes sure the distinction is clear, beginning with "Real quarterbacks don't look through passing windows when they drop back, so why should you?" and ending on the same point: "So if you love passing windows, buy another game. If you love passing, buy EPSN Sunday Night NFL" (Vampyre Mike). More recently, in February of 2015, the Guardian ran a story in its technology section on the state of photorealism in videogames, declaring that "We're heading into a new era of physical-based rendering, where the properties of individual textiles and materials are simulated to produce natural, reactive environments," and citing Tony Tamasi, senior vice president of content and technology at graphics hardware producer Nvidia: "We're at the point where these things can produce truly involving experiences" (Stuart). The article ends with a look towards the future, as Tamasi speculates that we have "decades more innovation to come." Twenty-one years separate the two pieces, as do very different tones; the NFL ad is brash and aggressive, as was typical of videogame advertising at the time, whereas the Guardian article is almost clinical in its focus on technical specifications, explaining the advantages of "highly parallel physical simulation algorithms" and the way light reflects off the human eye. However, both pieces share at least three things in common: (1) a belief that superior technology leads directly to a superior, more affective videogame experience; (2) a direct tie between that technology and superior graphic-based realism; (3) and, while both contain images, both are noticeably using text to support the very concept of that graphic-based realism.

The focus on graphic-based realism extends to directly to videogames as well, as many scholars have noticed. King and Krzywinska note that "the history of videogames has been "dominated" by "investments in increasing realism, at the level of graphical representation and allied effects" (125). Graeme Kirkpatrick goes so far as to argue that videogame scholarship has been dominated by the focus as well, to the detriment of other salient elements of study, such as the controller (105). Further, he points out that even in videogames lauded for their visual realism and immersive potential, text plays a heavy orienting role, as he illustrates through *Grand Theft Auto: Vice City*:

The salience of written messages in particular within game 'worlds' has a strangely corrosive impact on the extent to which we find visual illusion compelling as illusion, while can actually intensify and focus to our engagement with the game object (as something else). ... There is a corresponding reduction or degradation of the rest of the presented scene, which now becomes just a backdrop when previously it was foregrounded and replete with coherent fictional significance. (69)

Kirkpatrick acknowledges that the use of text in videogames belies the emphasis on graphical realism, but his choice of words—the text is "strangely corrosive" and provides a "reduction or degradation"—implies that the text's presence does damage not just to the claims of graphical realism, but the graphics themselves. The two immediate options seem to be that the text in videogames is either nonexistent in terms of what makes a videogame worth playing, or waging war against the image's dominance.¹

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¹ For further examples of videogames and the pursuit of graphical realism, see Bateman decrying the pursuit of technical refinement ("Unimpressive"); Amanda Lange on how the high graphical realism of *Drake's Fortune*

Other graphic approaches are certainly possible, such as retro-pixel aesthetic and the cute aesthetic of mobile games such as Candy Crush Saga; it is worth noting, however, that the textual marginalization that happens in a game such as the hyper-realistic Far Cry also occurs in match three games that seek to focus players' attention on matching gems over an unfolding storyline. Further, games that do deploy a retro-aesthetic, such as *La-Mulana*, are often nostalgic looks back to the past or deliberate rejections of modern game aesthetics; in either case, they call on the player to be aware of, and sometimes they even reinforce, accepted videogame history, which frequently includes the notion of graphical realism as the unstated ends for technological progression. An investigation of these aesthetics as variations that deliberately depart from industry norms (while cultivating and conforming to new/old industry norms) would certainly be useful, but beyond the scope of this dissertation.² From the start. I would like to be clear that I am not claiming that graphical realism is the sole driving force of the videogame industry, nor that it is *the* dominant force behind the gaming industry, but it is certainly a dominant force. My primary concern is how text, and not images, can be deployed within videogames, and as such, graphical realism is a frequently a useful context for how and

comes at the cost of its ability to convey affordances; Eron Roch with the argument that photorealistic game design shares something in common with the excesses of pre-Impressionist art (though admittedly, he also argues that indie game development permits a departure from this form ("Echoing Histories")). For another scholarly example, see Hutchinson on the technological capacities of *DOOM* and *Myst* (this article will be discussed in more detail in chapter 3); for a comedic look at the consumer side of graphical realism, see Chan.

For more on *La-Mulana* in particular and the aesthetics of retro-game design in general, see Brett Camper's "Retro Reflexivity: *La-Mulana*, an 8-bit Period Piece." As designer Kyle Pittman points out, retro is also its own aesthetic, one that tends to resemble what "Indie developers think retro games looked like" rather than the reality. Finally, one significant motivation for retrograde game design is that, as in a game like Jonathan Blow's *Braid*, or simply minimalist design in general, such as in Anna Anthropy's *dys4ia*, is that it allows greater scope for personal expression. In that sense, Twine games such as *Depression Quest* can be usefully viewed as retro games that harken back to text-based games and Choose Your Own Adventure novels with a more personal focus; Twine games will be discussed in terms of personal expression in more detail in the conclusion.

why text is regulated to a support function.

My goal in this dissertation is to use examinations of text portrayal in videogames to counteract both the view that emphasizes graphical realism as the driving force behind videogames, and the view that if text is not just supporting that realism, it is acting in opposition to image. However, I aim not merely to present a third alternative for image and text in games, but to present a myriad. To provide context for my own approach to studying videogames, it is useful to briefly describe the history of game studies. Typically, the proposed "founding" of game studies is dated around Espen Aarseth's 2001 "Computer Game Studies, Year One" editorial, which somewhat polemically declared that the two most relevant approaches to game studies were studying games as narrative structures or ludic systems, with Aarseth most definitely siding with the latter. Future scholars distanced themselves from the opposition, whether by adopting compromising positions (Juul, *Half-Real*), declaring that comparison was flawed or even false from the start (Bogost, "Videogames are a Mess"; Moberly) or simply turning their attention to other approaches, from platform studies to ethnography.

At a glance, an examination of text in videogames may seem to lend itself to a narratology approach; from the declaration that "Your Princess is In Another Castle" in *Super Mario Bros*. to the pages and pages of books in *Elder Scrolls V: Skyrim*, text plays a very heavy role in establishing videogame story, and text-heavy games are frequently connected to print fiction, to the point where the text-based games of Infocom were marketed specifically as interactive fiction. But text is also equally able to connect the player to the rules of a given game, whether it is through a written instruction manual, a configuration menu, or even the

case of a game where the graphics *are* text, such as the original 1980 dungeon crawler *Rogue* or the dazzlingly complex simulator *Dwarf Fortress*; for such games, whatever ludological nature it may have, it is through text that player experiences it.

In short, as many scholars came quickly to realize, choosing ludology over narratology or vice versa meant an unnecessary limitation. Likewise, for this dissertation, I have not selected any single school of theory or approach. Rather, I have selected the lens best suited for specific topics and discussions throughout the dissertation. In particular, I draw on variantology, paratext, the three circuit model, and mimesis as make-believe, not as foundations from which all else flows, but as touch points suitable for a larger discussion or relevant to a specific work at hand.

As stated, videogame history is dominated by a narrative that emphasizes graphical realism and technological progress, to the point where past events are reshaped as stepping stones towards new pinnacles, erased entirely, or visited only through the light of nostalgia. To counter this perspective, I employ Siegfried Zielinski's concept of variantology, itself a subbranch of media archaeology. Jussi Parikka defines media archaeology as "excavating the past in order to understand the present and the future," or more concretely, "a way to investigate the new media cultures through insights from past media, often with an emphasis on the forgotten, the quirky, the non-obvious apparatuses, practices and inventions (*What is Media Archaeology?* 2). To Parikka, this study is a pursuit with a number of predecessors and approaches: Foucault's conception of archaeology as a means for excavating "conditions of existence" (6, emphasis in original); Kittler's emphasis on the history of technical media; studies of modernity that illustrate its role as the foundation for contemporary media and

industry (8); studies of cinema history, particularly in terms of moving beyond characterizing early film as primitive technology (10); media archaeology as alternative history, as a counter to trends that posit media developments as inevitable (13); and, finally, histories of the present, as a way of reframing how we conceive of new media by exploring how relative term may be by applying it to old media(11). It is in this category that Parikka places Zielinski, and variantology.

Variantology, as Parikka explains it, is a "way of developing an alternative temporality that moves away from a hegemonic linearity that demands that we should see time and history as straight lines that work towards improvement and something better" (12). For Zielinski's part, rather than an approach to media history which emphasizes a state of constant progress and a given origin, or even the discontinuous approach adopted by Foucault, which he finds too bound to a single main idea, he promotes the philosophy of the "fortunate find": "For two or three years, I have worked only with the concept of variantology.... As opposed to the heterogeneous, with its heavy resonances from ontology and biology, the variantological, in its methodological and epistemological respect, interests me as a mode of lightness" (Zielinski, "Interview"). To take a variantological approach to media history is to take objects that are not part of the established history of progression and look at them not as dead ends but as variations, alternative modes that present alternative ways of thinking. Further, Zielinski's characterization of variantology as a sense of lightness, as research wherein one must "let the horse gallop free, without knowing what exactly will arrive" strikes as well-suited for a study of videogames, as it calls on the researcher to engage with her subject with a lusory attitude, a spirit of play. While my own investigation is slanted towards the picture theory of W. J. T.

Mitchell and conceptions of mimesis than traditional forms of media archaeology, it is the spirit of Zielinski's variantology that informs its direction.

At this point, I would like to briefly discuss my selection of games and texts throughout the dissertation, as variantology has played a large role in shaping my choice of videogames for this dissertation. When possible, I have attempted to seek out games that vary from the established norm in some way that meaningfully informs a discussion about text's function in regards to videogames. For the first chapter's first half, I examined over 100 videogame manuals, selected in order to represent as much breadth as possible in terms of years published and hardware. The purpose of this wide net is to cast a general history of the videogame manual; the variantological part comes in for chapter's second half, wherein I examine the same pool of manuals to argue for the ways in which they present alternatives to that general history. In the second chapter, three games from Infocom's canon represents the heyday of the text-based commercial game and its literary aspirations and Cinemaware's 1989 It Came From the Desert, made in the twilight period of the Commodore Amiga, illustrates a combination of image and text that is ahead of its time; while the other major games in that chapter, the textbased and Atari versions of Adventure, and the first three main games in the Super Mario Bros. series cannot be said to be deviations from the main videogame history, but they serve as useful comparisons to the others featured.

Likewise, the focus of chapter 3, *DOOM* and *Myst* are arguably not within a variantological scope that seeks to deviate from the norm of graphical realism and technological progress, but my focus in both cases is how an alternative, text-oriented investigation can shed new light on how they are commonly perceived. The 1999 *Planescape*:

Torment, the focus of chapter 4, uses its Dungeons & Dragons setting to create a text-heavy gameworld to a degree extreme to this day, with a script that amounts to over 800 000 words (Gillen). Finally, chapter 5 looks at a wide variety of games that feature the depiction of books within videogames, and these games (primarily, Ni No Kuni, Final Fantasy Tactics, Shining Force, Nier, Dragon Age: Inquisition, and Alan Wake) were chosen to demonstrate the variety of approaches available for such an incorporation.

No videogame exists in a vacuum, however, and to address larger contexts, I apply the notions of paratext and the three circuit model. Paratext is derived from literary studies, wherein Gerard Genette employed it to describe anything that influences the reception of the main text. Genette divided paratext into peritext, which was any sort of paratext within the book itself—chapter titles, forewords, even footnotes and fonts—and epitext, which was mainly the promotion of the book, through advertisements, press releases and interviews, and (in Genette's application, at least) generally limits paratext's use to that which was deliberately inserted by publisher or author. Its use has been adopted by game scholars, most notably Mia Consalvo and Steven E. Jones. Jones, in applying paratext to videogames, extends it beyond Genette's limits, arguing that "For video games, paratext is integral to the experience of play, manifest in something as familiar as interface conventions or in gamer community interaction" (14), and goes on to discuss its presence in the way communities of players discuss the *Halo* series, or even how viewers discuss Lost. Consalvo employs it in a similar fashion, discussing how "Gaming magazines, strategy guides, mod chip makers, the International Game Exchange, Even Balance and other companies, and industry segments work" not just to shape any individual game, but what it means to play any videogame (9).

My own application of paratext tends to fall somewhere between the authoritative credit Genette charges it with and its typically broader application in game studies. The advantage paratext has over other similar terms such as transmedia is that the latter often designates a constellation or network of associated media objects; paratext maintains such groupings, but allows discussion to focus on one primary text. While this focus can lead to its own confusion, especially in terms of peritext—is a title screen peritext or just text? What about a cutscene? A loading screen?--it is useful for discussing media products that are clearly designed to have a close association with a given videogame. While I use paratext throughout the dissertation, it is most central in the first chapter in the discussion of videogame manuals, which are essentially epitexts frequently sold as part of the videogame and sometimes necessary to start playing it, yet still held apart as something separate.

The three circuit model, on the other hand, comes directly out of videogame study. Specifically, it is coined by Stephen Kline, Nick Dyer-Witheford, and Greig de Peuter in their seminal book on the videogame industry, *Digital Play: The Interaction of Technology, Culture, and Marketing.* The three circuits under questions are those of the subtitle; in essence, the authors argue that the videogame within the larger context of global capital must be understood in terms of the practices of inventors, machines and users, the production and circulation of meaning of media texts, and through the communication practices that link the gaming marketplace (23). Through this lens, they examine such issues as the Nintendo brand, the game industry's origin in military industrial complex, and piracy in the global game market.

A possible weakness of *Digital Play* is that throughout the book, the specificity of individual videogames fades into the woodwork, so that in many places, the authors could be

referring to any technology-heavy media product. While the authors address this lack somewhat elsewhere,³ I maintain that one of the chief benefits of the three circuit model is how it provides context for individual games, providing venues of information about the game's larger development and reception. As such, the three circuit model offers grounding to game studies, a discipline whose practitioners are sometimes accused of a tendency towards formalism. Consideration of how a videogame, or part of a videogame, was formed through a combination of technological choices (such as platform, or hardware), cultural forces (such as depictions of gender, or violence within the game), and commercial demands (such as the advertising paratext related to a game) provides useful context for the way text functions within that game. It should be noted that I am not applying the method as Kline, de Peuter, and Dyer-Witheford apply it, as I am not going to be directly investigating the technology, industry, and culture from which videogames emerge. Rather, I use the three circuits method as a useful way to frame the context from which specific games (and occasionally, paratext of games) emerge.

Finally, as this introduction should have already made clear, a major preoccupation of this book is forming a challenge to the dominant discourse of graphical realism in videogames. A significant part of that critique is the presentation of an alternative, taken again from a realm outside of videogames (though, as I will discuss, it has been pressed into service by a variety of game scholars). Kendall Walton argues that the usual Western definition of mimesis as the representation of reality is insufficient, given the full scope of human activity and imagination. Instead, as the title of his book suggests, he proposes that we should define *Mimesis as Make-Believe*, that any representational work, from a novel to an abstract painting, presents a set of

³ See, for example, de Peuter and Dyer-Witheford's *Games of Empire*.

fictional propositions that it asks its recipients to believe in, and to make their own additional fictional propositions as well, constituting a fictional world for the work and a separate fictional world of the recipient's creation as well (58).

The advantage of mimesis as make-believe is that it does not stand in opposition to realism, whether it be graphical realism or that of any other stripe. Rather, it provides a model that can encompass realism, yet allow more room for both fictional elements that contradict that realism and for the person viewing the representation to respond with her own imaginative fictions. Mimesis as make-believe may originate in Walton's study of film, literature, and art, but it is well-suited for game studies, for at least four reasons: there is already a tendency to refer to what is depicted within many videogames as a "gameworld"; Walton's emphasis on fictional propositions support both narrative- and rule-heavy approaches; Walton places equal weight on the imaginings of a child and those prompted by the "great works" of literature, which fits well with the common dismissal of videogames as toys for children; and finally, as with variantology, mimesis as make-believe structures itself around a sense of play in a manner that makes it particularly appropriate for a study of videogames.

My dissertation is divided into five chapters, five distinct yet related approaches to considering how videogames function in relation to text. Chapter 1, "A Short History of the Videogame Manual and Other Paratexts," concerns itself with the text-heavy paratext that was once closely associated with the videogame, the instruction manual. As an epitext, the videogame manual's relationship to the videogame is fraught with a basic contradiction: in order to properly fulfil its instructional role, it must contain all information essential for playing the game. Yet at the same time, it also should be to some extent superfluous, as many

players will skip over it entirely. This frequently conflicting nature means that the instruction manuals are both documents that speak to the history of videogames—as each pertains to what the developers felt was most important about an individual game—but also a collection of variants, as developers used a variety of different techniques to connect the manuals to the videogame at hand and attract the player-reader's attention.⁴

The first half of this chapter outlines that history of videogames, as reflected in the manual. Beginning with the Atari 2600, the manual reflects the growing sophistication of the console videogame, moving from providing a variety of modes and replicating an arcade experience to creating its own gameworlds and stories—albeit stories that sometimes existed more in the manual than in the game itself. The manual continues to trace new technological sophistication in videogames—stratified genres, 3D worlds, online play—until a point in the early 21st century, wherein the games themselves reach such a level of sophistication that the manuals are seen as even more superfluous, and are greatly truncated, or reduced entirely. But a variantological approach to manuals means looking at them as more than a dead-end paratext; they provide several variant approaches to how text and image may be used in print form to influence reception of a game. In the second half of the chapter, I tease out some of these variant forms and their implications: the manual as comic book, the manual as picture book, the manual as developer capital, and the manual as found object.

The second chapter, "From Separation to Fusion: Text in Early Videogames," shifts the investigation to videogames themselves, specifically the videogames of the 1980s. The 1980s were a tumultuous time in the videogame industry, both prior to and after the collapse of the

While I use "developer" here, the situation can be more complicated than that—the manual could also be manufactured and produced by someone associated with the publishing, or a third party altogether that specializes in manual production.

home console market, a period characterized by experimentation and industry professionals still feeling out the boundaries of videogame design. Historically, image and text have been placed in conflict with each other, as detailed by W. J. T. Mitchell; their competition becomes a battleground for other cultural conflicts. In this time period, console and home computer videogames embody, if not a cultural conflict, than a technological one through the image-text split, reflecting two technologies developing in parallel, as demonstrated by the Atari and mainframe versions of *Adventure*. The graphic-emphasizing home console games were influenced greatly by existing models provided by the arcade and by television, but went on to establish their own image-based vocabularies. The PC, or personal computer, in its many different incarnations and forms, provided the text-based information processing that made the text adventure games of Infocom both technically possible and commercially feasible—until technological innovation rendered the games obsolete, at any rate. The two platforms gave rise to very different sets of text-image relationships, due to the technological affordances, economic realities, and cultural backgrounds they catered towards.

The chapter culminates in an in-depth study of *It Came From the Desert*, a 1989 videogame that represents text and image not as parallel approaches, but a united force.

Designed by Cinemaware for the technological powerhouse—but ultimately discontinued—Commodore Amiga, *It Came From the Desert* was made as part of a series of games that welded together cinematic and arcade experiences within a personal computer setting. The action of the game stars the player as small town geologist Greg Bradley, working against a strict fifteen day clock to convince the town folk of the impeding invasion and successfully fend it off through a one-man attack on the ants' queen. *It Came From the Desert* is a

(admittedly loose) computer game adaptation of the 1954 giant ant horror film, *Them!*, and as such, it carries forth themes common to the films of that period, relying on notions of authority and interior/exterior threats. The relevance to this dissertation is that these themes are translated into the videogame in terms of an image/text opposition. Interior threats appear as textual, as the game describes Bradley's alienation from the townsfolk and his attempts to translate visual traces of the ants' presence into textual, verified evidence at the local university. The ants themselves are the external threats as monstrous images, and as representations of the monstrous image of nature inverted to ignore humanity's dominance, they come to represent the horror of *It Came From the Desert*, a videogame that ignores the player's dominance by continuing to its culmination whether the player acts or not. Ultimately, the player must use a mastery of text to tame the image, then embrace it, through the image-laden final sequence navigating through the ants' giant hive.

The third chapter, "Text and the Myth of Graphic Immersion in *DOOM* and Myst," takes the dissertation into the early 1990s. The 1990s were, for videogames, a period of rapidly accelerating technological development. As the PC became an increasingly common fixture of the typical household, the Internet made networked gaming possible, and the console market went through a flurry of new systems attempting to overthrow Nintendo's hold, with varying degrees of success. In particular, this era was when videogames became dominated with claims of graphical realism, including the proliferation of 3D graphics. Mimesis has played a large role in the history of representation, from Plato's condemnation of the mimetic arts and Aristotle's avocation of the mimetic model to more modern versions that equate mimesis with realism. This history is significant to videogames, as they share much in common with older

media, especially in terms of how verisimilitude to reality was often presented as a desirable goal yet also grounds for censorship. Further, realism has also been discussed more directly with the videogame, and to that end, I explore functional mimesis, mimetic controls, and simulation and their relation to graphical realism.

With this theoretical basis established, the stage is set for an investigation of two videogames that were once held as the epitome of graphical realism, the 1990s videogames Myst and DOOM. Myst was an early entry point into PC ownership, and its application of CD-ROM technology showcased what the PC was capable of. Myst's creators go to great lengths to establish it as a complete, realistic world through an interfaceless interface that emphasizes the graphical display in front of the player. But even while Myst capitalized on a reputation of graphical realism, its actual puzzles and gameworld depend on other forms of mimesis and a heavy reliance on the creative power of text. DOOM, for its part, played a foundational role in the establishment of the First Person Shooter genre, popularizing a graphic perspective often touted as immersive to a relatively unfamiliar audience. But while DOOM's creators did what they could to de-emphasize the significance of story, it is undeniable that text guides players throughout the game, in orienting their attention through the Head-Up Display and cultivating what it means to be a gamer through the game's aggressive, sensationalized flavor-text. Moreover, *DOOM* and *Myst* illustrate the limitations of the graphical realism model, that once they are no longer technological cutting edge, their significance, under this model, must be diminished as they are replaced by newer, more sophisticated models.

Chapter 4, "A Close Reading of Text Support in Videogames: The Case of *Planescape: Torment*," presents an alternative model to graphical realism, Kendall Walton's mimesis, and

explores the text-heavy *Planescape: Torment* in that context. As mentioned previously, benefits of Walton's approach for videogames in particular is that it cuts through discussions of narratology and ludology, and allows room for the player and fan's engagement with the gameworld. As game scholars and designers have discussed, "believability" is frequently a more useful concept for a videogame than realism, and through the make-believe approach, games such as *DOOM* and *Myst* can reclaim their value.

The gameworld in the 1999 *Planescape: Torment*, with its heavy emphasis on text and on the creative power of belief, is ideally suited for Walton's approach. The game is based on a subsetting of *Dungeons & Dragons* and concerns the existence of an amnesiac immortal. From its title screen onward, the game was designed to reverse many of the typical fantasy tropes, including removing Tolkien-esque overtones inherent to Dungeons & Dragon, moving beyond a common videogame dichotomy of good and evil, and, most of all, employing its unusually high reliance on text. In order to illustrate how thoroughly text guides the videogame, I investigate much of what it has to offer: art and character descriptions more detailed in text than in graphics; tattoos that inscribe the character's destiny and preserve his past; a dialogue system charged with significance through colour, placement, and atypical accents. The game's use of journals is particularly significant here, as the amnesiac player-character is told again and again through the plot of the game how essential a text account is to preserve one's identity. Finally, two of the game's endings culminate in non-violent resolutions that revolve around either the player-character's successful search for his missing, originary name or a full realization that the world of game is literally shaped by the player-character's belief in it. Not all (or many) videogames draw so explicitly on the creative power of belief as much as

Planescape: Torment, but it amply illustrates how viewing mimesis as make-believe can help explain a text-heavy approach to videogame representation.

The final chapter of the dissertation, "The Book in the Game: Variations on a Theme," returns full force to the theme of variantology. Frequently, the book, as a symbol of knowledge and text, is placed in rhetorical opposition with new media. Videogames' general emphasis on graphics caters to this opposition, regardless of any basis in fact. In order to provide an alternative viewpoint, I explore how the book, particularly the book as a representation of text, is portrayed within videogames, mapping out five distinct variations: the book as external paratext, the book as frame, the book as menu system, the book as in-game object, and books as allusive structure. What I find is that there is no one single characteristic purpose of the use of books in games, or even five, to correspond to each variation; rather than the book and the videogame existing in an oppositional state, there are countless possible configurations and variations, many of which rely on the videogame's ability to represent text just as much as image.

The book as external paratext is a return to the first chapter's focus on paratext, this time through looking at books created as epitextual props to support an existing gameworld. *Ni no Kuni*'s The Wizard Companion is a particularly useful example in this regard, as the decision to turn it from an epitext to a peritext in the transition from the Nintendo 3DS to the PlayStation 3 version of the game fundamentally changes not only how the Companion is read, but how the game itself functions. The book as frame considers the not-infrequent case in which the entirety of a gameworld is framed as if occurring with the pages of a book. While there are multiple examples of such framing, a particularly good example is *Final Fantasy*

Tactics, wherein the framing prompts the player to question the seeming permanence of history, and the veracity of the events they are playing through. The book as menu system occurs when the trappings of a book are applied to a portion or the whole of an in-game menu system. While I consider many examples of such systems—Radiant Historia, Bravely Default, *Planescape: Torment*, and *Ni no Kuni*—the primary case is the 2010 videogame *Nier*, where its reliance on a book-based menu system to represent the player's character becomes the culmination of dozens of hours spent subverting role-playing videogame norms. The book as in-game object briefly looks at how books are portrayed as objects entirely within of a gameworld, a representation that is almost always the abstraction of a book, but still carries with it assumptions for what reading means within that gameworld, offering varying accounts in games such as Shining Force, Wild Arms 2, and Dragon Age: Inquisition. Finally, the last section of the chapter explores how videogames make allusive reference to existing books, through overt adaptation, oblique reference, or anything in between. Of particular relevance is the horror game Alan Wake, in which its many meta-references to horror writers such as Stephen King create a closely knit web of allusive, transmedia association.

1. A Short History of the Videogame Manual and Other Paratexts

Introduction

Many videogames encourage players to associate their actions inside a gameworld with a particular focal point character, creating the hyphenated hybrid commonly called the player-character, or PC. The association is especially pronounced in first-person games, where the players are encouraged to see the screen in front of them as a replication of the PC's field of vision, but the same identification is encouraged in many third person games as well, in games as diverse as the anthropomorphic side-scroller series *Sonic the Hedgehog* to the cinematically-influenced, hyper-realistic *Uncharted*. The video game manual is then left in an odd position, as its purpose often calls for separating player and character in order to clarify instructions, but at the same time it must also serve the frequently contrary purpose of reinforcing the narrative of the gameworld.

As an example, in Nintendo's long-running Mario series, the player usually is identified with Mario, the portly, mustachioed plumber with a penchant for fighting giant turtles and eating strange mushrooms. But the *Super Mario 3* instruction manual wrenches away the hyphen between player and character, leaving instead a strange gap. The manual begins with an imaginary letter from Mario to the players (temporarily the readers), asking them how they have been in his absence, and inviting them to come along to fight Bowser, who is "up to his old tricks"(3). The separation continues through the manual as the new subvillains of the game, Bowser's children the Koopalings, appear periodically to brag to the player-reader about their chance to show their prowess against Mario, further differentiating between Mario and the player-reader. The commentary culminates in an entreaty from Ludwig van Koopa, confessing

to the player-readers that the list of enemies here is not complete, but asks them to refrain from telling Mario that (41). The most obvious purpose of an instruction manual is to instruct the player on how to play the game at hand. But in the context of this manual for *Super Mario Bros. 3*, the player is not the character, nor is she just the player, by virtue of being directly hailed by denizens of the gameworld as an equal. What is going on in this manual, and how is it shaping the way the player-reader conceives the game?

While most instruction manuals do not suffer from quite the same existential crisis as that provoked by *Super Mario 3*, the relationship between the videogame and its manual is one that marks the manual as a secondary, marginal media artifact. The instruction manual serves as a paratext, to adopt Gerard Genette's phrasing, to the main text of the game itself. At first glance, the videogame manual's history appears to be a mirror image of the history of videogames. Tracing the history from the advent of the Atari 2600 to the current day, we see a direct correlation between the sophistication of videogames and the sophistication of the manual. The expansion of complexity continues until a period around 2006, when the videogame manual begins to shrink, and in the case of many of recent games, disappear altogether.

Under this technological progressive narrative, the instruction manual grew in size to correspond to the advances in videogames, until the videogames advanced beyond the need for them at all, turning the manual into a dying, perhaps dead medium. However, following Siegfried Zielinski's theory of variantology, it is more useful to think of abandoned media forms not as dead ends, but as variants that explore different ideas and conceptions. The variants of video game manuals are, then, a diversely large group. Some incorporate other

mixed media forms, such as the comic book or picturebook. Some overtly promote notions of ideal players and design ethos. And some attempt to enlarge the world portrayed by the game by pretending to be a part of that gameworld. Under this variantological lens, the videogame instruction manual does more than inform the player how to play a game at hand—it offers instructions and ideologies on what it means to be a player in the first place.

Before embarking on a historical overview of videogame instruction manuals, it should be noted that the following discussion is organized primarily around the chronological releases of North American platform console systems. Obviously, this schemata is not the only possible configuration, and other configurations may have shone a light on elements that the platform console configuration obscures. An instruction manual study based on game publisher, for example, is better equipped to delve into differing ideologies of game design, as will be demonstrated later with the Atari-era manuals from the publisher Activision. A study based primarily on game genre, however that may be defined, is well suited for explaining difference in manuals designed by the same company, for the same console, as in the case of Konami's Silent Hill series' minimalist manuals in comparison to the much more visually complex Metal Gear Solid manuals. For that matter, a historical approach centered on console system has the potential to be misleading, as it is easy to overstate the relation between "current generation" consoles without regard to the actual dates of release. For example, the Sega Genesis is generally considered to be concurrent with the Super Nintendo, but it was actually released in North America in 1989, whereas the Super Nintendo was released in North America two years later. For that two year period, then, a more useful point of comparison for Sega Genesis manuals is not the Super Nintendo manual, but those of the earlier Nintendo Entertainment

System.⁵

But there are more pressing reasons to pursue a history of videogame instruction manuals from the vantage of a platform console configuration. First and foremost, this method foregrounds the materiality and technology of videogames. Publisher identity and genre, while salient concepts capable of wielding considerable amounts of meaning, are rather ephemeral, and need to be carefully anchored in particular instances and artifacts. Game studies in general occasionally suffers from treating games as an abstract category, a collection of rules that can be transferred from one material substantiation to another without significant difference. ⁶ A videogame manual, especially in its twentieth century form, is a material, physical product. While the technology of the manual itself may remain fairly static, it is always associated with a product defined by a technology that has historically changed very rapidly. A videogame instruction manual accompanies the game cartridge or disc, is contained within the game package, and is associated, through the game, with a particular configuration of hardware and software, whether that hardware is a Nintendo Game Boy, or a Pentium personal computer. Most importantly, the focus on the material technology of videogames corresponds with one of the pervading notions of videogame development, that each generation of console contributes to a graphically superior, immersively better experience. My argument is that this superiority view of game history should be read as one variant among many rather than a single leading

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There are, in fact, several games that were ported to both the Sega Genesis and the NES, such as Epyx's *California Games*. For that matter, there are games that were ported to both the NES and the Super Nintendo, such as Koei's *Nobunaga's Ambition: Lord of Darkness*, and their respective manuals can be compared appropriately.

Steven E. Jones elaborates on this point in his book *the Meaning of Videogames:* "Some ludologists sometimes ironically seemed prepared to recapitulate the history of twentieth-century *literary* formalism, with the 'game itself' replacing the New Critics' 'text in itself' as the hermetically sealed object of attention, rules and procedures replacing tropes and symbols as the features to be analyzed in isolation of authorial, historical, or cultural factors" (5).

force, but the system-based approach to instruction manual history is more than a straw man argument created to be immediately demolished. It participates in a dominant, overarching discourse on game development, with the advantage of foregrounding the underlying platform materiality behind the videogames.

The Dawn of the Videogame Instruction Manual

The connection between a videogame, its underlying complexity, and the need for proper instructions can be traced back at least as far as the first commercial arcade machines. Nolan Bushnell attributes the relative failure of the 1971 arcade game *Computer Space* (based on the even earlier 1962 mainframe game *SpaceWar!*) to the fact it was too complex for a mainstream audience (Donovan). The machines did well at locations near college campuses, but confused the regulars at "working man's beer bars," as well as regulars in the arcade industry, who were more used to pinball machines (ibid). One year later, *PONG* hit the arcades, becoming a massive success with all audiences. The instructions that came with *Computer Space* were vague and difficult to contextualize, conveying references to engine thrusts, missile conservation, and hyperspace to an audience that had never played a videogame before. In contrast, *PONG* had three lines of instructions, with only a single one relating to gameplay: "Avoid missing ball for high score."

The contrasting fortunes and instructions for the two machines illustrate in embryonic form key issues that arise frequently in the history of game instruction manuals. The obvious purpose of a videogame manual is to inform the reader how to play the game, but as *Computer Space* demonstrates, how much instruction is needed varies depending on the audience and the game. Vague verbal instructions are often bolstered in manuals by visual aids such as screenshots and icons, but neither were supplied in the case of *Computer Space*, leaving it to the player to discover the instructions' meaning through play, an investigation the arcade audience and "working class" pub members were unwilling to do. And while *PONG*'s success is probably not directly attributable to the simple instructions, its simplicity of play was

certainly part of its appeal, and that simplicity is reflected in the sparsity of its instructions. As later attitudes towards manuals make clear, *PONG* reflects a general belief in gaming that a successful game should on some level be self-explanatory, and thus require little in the way of instruction.

The early arcade games are the first instance of videogames with instructions being presented to the general public. But the true start of the videogame instruction manual comes a few years later, with the 1977 release of the Atari 2600. While it was not the first home console system, nor the first to utilize a cartridge-based delivery system—that credit goes to 1976 Fairchild Channel F—it is the system that popularized the cartridge form. Before the 2600, games came built into the game machine directly; in other words, before the Atari 2600, you didn't have video game instructions, you had system manuals. The cartridge allowed a home videogame to be conceptualized as something separate from the system used to play it, something that came with its own packaging, box art, and instruction manual.

Atari 2600: Three Phases of Manual

The Atari 2600, then, was the first commercial game system to extensively use the videogame manual, and the resulting manuals, especially those for first party Atari games (games developed by people working directly for Atari), can be seen as a synecdoche for the development of videogames. Manuals produced directly by Atari came in three distinct phases, their forms so standardized that it is relatively simple to place the approximate year a game was released by virtue of their manuals' content and choice of headings. An in-depth study of the manuals for two 1977 games, Surround and Space Ship, suffices to demonstrate the bright visual style and simplified content of the early, first phase Atari games. Surround's manual is six pages long including the cover, and *Space Ship*'s is twelve pages, and in both cases, the manual's sections are marked by alternating coloured headings. The covers are also similar for both, with the game title and the words "Game Program Instructions" appearing at the top in yellow and white lettering, over a black background. Below the heading is a picture depicting, in Surround's case, two people, male and female, facing away from each other and handling joysticks connected to massive console panels, with a series of square block around them. In Space Ship's case, the picture illustrates a fleet of white ships with red stripes firing at other ships, over a canopy of planets and stars. For both manuals, the cover image is carefully framed by the surrounding all-black background, suggesting that the manual offers a window into a larger world. By that framing, they thus share something with the letter from Mario in the Super Mario Bros 3 manual, in that all three manuals, explicitly or implicitly, invite the reader into some separate space, or fictional gameworld.

The interior of the manuals make no mention of any such gameworld, however. Rather,

the text is strictly limited to the information needed to play the game at hand. *Surround* is a *Snake*-like game where the players leave a track behind them in the form of an uncrossable line as they move, and the goal is to force your opponent to collide with the existing traces. The manual consists of six sections (discounting the cover). First, a brief section explains how to set up the Atari system. The next section, "Difficulty," explains the use of the buttons on the Atari 2600 for the game; the third section, "Controller Action," describes how to move the front of the track within the game. The fourth section, "Game Features," describes possible game variations, as does the following section "Video Graffiti," a variation of *Surround* in which the players focus on drawing pictures with tracks rather than competing. The manual ends with a table summarizing the variant modes. In the entire manual, there are only three instances of images being used: the aforementioned table of variations at the end, screenshots that depict visually the difference between modes, and an icon of the joystick to illustrate movement.

Despite being double the size of *Surround*, the *Star Ship* manual follows a similar layout. The system set-up is followed by "Controller Action" rather than "Difficulty," but the information provided is largely the same. The rest of the manual sections—"Star Ship," "Warp Drive," and" Lunar Lander"—are again variants of the original gameplay, with a table summarizing the result at the end. In addition to the same use of images as in *Surround*, each major variant of *Star Ship* also has pictures of in-game sprites, depicting what can be shot or controlled by the player under that variation. These two manuals are typical of the period, and typical of the use of images and text in these manuals. Though the cover of the manuals promise entry into a gameworld, the manuals' interiors describe variations on basic game types

rather than a continuous, vast environment to explore.

Atari manuals of the second phase, from about 1980 to 1982, tilt the balance from game variations to gameworld, reflecting the same shift in the games themselves. The 1982 game Star Raiders is an apt example of the change. It is twenty pages long in comparison to Surround's six pages, and demonstrates its greater complexity—or at least its designers' desire to make it appear more complex—by including a table of contents, whose very presence suggests that the material in the manual is voluminous enough that such a guide may be required. The next new section of note is the one with a bombastic title of "Avenge the Doomed Planet!". A brief section such as this describing the in-game story—or often, plot points too complicated to depicted in the game itself—becomes a standard item of game manuals, and is often called "introduction" or "backstory." The inclusion signals a crucial change in how games are presented. In the first phase of Atari games, their status as games was first and foremost, as demonstrated by the focus on scoring and alternate modes. The shift towards including even the most basic backstory beyond just a cover image signals a definitive change in how games are to be interpreted: videogame players are not just playing a digitized game. Rather, they are entering into a gameworld, a space where they are granted a specific position and role. The player is becoming player-character, and the manual is helping with that transition, supplying the narrative component that the game is still unable to present itself in anything beyond a rudimentary fashion.

The story is not the only significant change in the *Star Raiders* manual, though not all of the elements of a first phase manual are forgotten. Familiar sections make an appearance including sections on using the controller and the console controls, which refer to the same

basic functions as previously: descriptions of how to control movement in the game, and an outline of the game's variations. Both of these sections are rather small, however, and, in the case of *Star Ship*, consist of little more than a page in total. Most of the manual instead is spent explaining gameplay, the basic mechanics behind the game. And in *Star Ship*, there is much that needs to be explained; players must keep track of enemy movement, their position on the galactic map, the presence of asteroids, the use of energy spent moving between the sectors, and the location of the remaining starbases, in addition to simply controlling the movement of their ships. This list is certainly much more complex than the "avoid missing ball for high score" of *PONG* and part of the instruction manual's purpose here is to present the game not just as understandable, but understandably complex, to convey that the game's complexity is a desirable trait that renders it just difficult enough to offer the player a manageable challenge.

Star Raiders makes this point in favor of complexity implicitly through its proliferation of helpful hints, charts, and labeled screenshots. Other games, such as the 1982 *Phoenix*, are more pointed about the difference between them and older Atari games: "Since PHOENIX consists of one continuous game, the GAME SELECT switch has no function. Since PHOENIX is difficult enough as it is, the DIFFICULTY switches have no effect on game play either" (4). The manual goes on to helpfully state that it allowed the switches to have at least one function; if you slide the left difficulty switch to A, then you can turn off the bird cry sound effects. The game variations, once lauded as the part of the game that deserved most attention and space in the manual, have, by the end of the second manual phase, been derisively rejected, and the buttons that chose the variations are appropriated to serve peripheral functions like control of sound effects instead. The second phase Atari manuals emphasize complex game

play and story in their games, and promote them in such a way as to make them appear superior to the simple but configurable games of the past.

The final phase of Atari manuals, however, is not a period of innovation, but decline. In 1983, the North American videogame market suffered a financial crash, and Atari was hit particularly hard. There were still Atari 2600 games developed after the crash, but they tended to be either of poor quality or come with manuals of poor quality, or both. The 1986 Solaris, an unofficial sequel to Star Raiders, is an example of the second category, as its gameplay is very similar to Star Raiders, but the manual is only eight pages long—or rather, a two-sided pamphlet, with four pages on each side, with no screenshots and the only colors present being black, white, and red. While the information in the Star Raiders manuals is considerably condensed in comparison to earlier manuals, it is, for the most part, still there; a worse case is the 1984 arcade adaptation *Millipede*. Its manual is four pages long and black and white, consisting of only three sections: getting started, playing tips, and scoring. The background is white with a series of horizontal, evenly spaced black lines, evoking a sense of foolscap paper. The design suggests that, in this case, the manual was deliberately pursuing a low aesthetic, to lend the game an aura of bargain cheapness. Regardless of whether the choice was deliberate, the two manuals demonstrate that the instruction manual, already a marginal text, becomes increasingly marginal for a console system on the decline, eschewing attractive imagery to focus on the primary function of providing generalized information.

Kirby and the Rise of the Nintendo Character

Part of the reason the Atari 2600 had become so marginal in the mid to late eighties is that it had been largely replaced by the phenomenally successful Nintendo Entertainment System (or NES, for short). With the 1985 North American release of the 8-bit home console,⁷ manuals changed again, moving further along the trajectory created by the second phase Atari games. The size of the manual had increased further; of a random selection of twenty-five games for the system, the average number of pages is twenty-seven. In this case, many of the changes in manual content and design emerge from the desire of game companies, especially Nintendo, to develop unique IPs (Intellectual Properties) and franchises. Further, even more so than the Japanese equivalent, the Famicom, the NES' primary target audience was children, and Nintendo had a strict censorship policy for games that included removing any reference to "illegal drugs, explicit or suggestive sexuality, alcohol, smoking material, graphic depictions of death, gratuitous or excessive violence, foul language, and ethnic, religious, nationalistic, or sexual stereotypes, or symbols" (Arsenault 111). How much of this censorship filtered through to the manuals is debatable, but Nintendo's resulting focus on games featuring child-oriented protagonists is not.

The manual for the 1993 Nintendo game *Kirby's Adventure* is typical of these endeavours. Like other Nintendo manuals, the dimension of the manual is much smaller than the Atari equivalent, and more square-shaped. And in comparison to the realistic images that often splayed the cover of the Atari manuals, the Kirby manual cover is, as are most NES manuals, much simpler, displaying the game's title in red and pink bubble letters over a light

Unless explicitly stated otherwise, all release dates should be assumed to be North American, even for games and systems that were released earlier elsewhere.

blue background. The manual interior begins with a page displaying and explaining the Nintendo seal of quality, followed by a warning regarding potential health and technology hazards for game players, both of which will be standard items for any Nintendo manual. The table of contents comes next, which is in turn followed by a five page outline of the game's backstory. 8 Next is a section of how to use the controller, complete with a photorealistic, labeled NES controller, followed by a section explaining how to transition from the title screen to the game proper. There is a clear sense of progression in the instructions, a movement from the general to the particular, as they start with an establishment of Nintendo's brand, (the seal of approval), and move from concerns regarding the system operation and player (the health warnings), to a meta-discussion of the manual (the table of contents), an engagement with the story (entering the gameworld), a description of general gameplay (the controller use), and finally, an account of how to start the game (the title screen). These elements, with the exception of the seal of approval, will become standards for game instruction manuals regardless of the system, and facilitate a slow immersion into the discussion of gameplay, starting with an account of the player and slowly moving closer to the game proper.

The largest section in the Kirby manual is the section entitled "How to Make Kirby Move." At ten pages long, it consists of nothing but a description of button combinations and pictures corresponding to the various moves available to Kirby (and the player) in the game. The sheer variety of Kirby's abilities demonstrates, again, the technological advancement of the NES over previous systems such as the Atari 2600, in that what the player can accomplish

This length is perhaps worth emphasizing; even Phase Two Atari manuals would devote one, occasionally two pages, to describe a galaxy-spanning space opera plot. That a platform adventure game for children revolving around a pink, marshmallow-like creature would warrant over double that for its backstory illustrates how much more weight was placed on *Kirby*'s gameworld.

with a NES controller is much more than what can be done with the 2600's single button and joystick. And the extensive use of images of Kirby in this section relates not just to the continued enforcement of the Kirby franchise, but also directly back to the element of story. For while the story of marshmallow-resembling Kirby is no more sophisticated than the alien invaders of Atari's *Star Raiders*, its presentation is. The entire manual is a self-conscious mix of images taken directly from the game and concept art. What appears most often in the manual are images of Kirby himself, shooting pistols, throwing shurikens, and performing other ingame actions, though notably in visuals more complex than the actual sprite-based game could portray. Through these visuals, the manual primes the player-readers to enter a game space that is more than just the screen in front of them.

The remaining sections of the Kirby manual employ a slightly different visual rhetoric, emphasizing in-game graphics through screenshots and cropped screenshots. "A Whole New World!" and "Bonus Games" have text descriptions of places from the gameworld, with accompanying screenshots meant to be representative of the location. "Power-Packed Items!" has text descriptions of the game's various items, with accompanying cropped screenshots showing how the item looks in the actual game. The relation between the text and the screenshots is worth noting. In his famous essay on images, "Rhetoric of the Image," Roland Barthes argues that text captions typically serve to anchor the meaning of a photograph or image (38-39). In the Kirby manual, as well as in countless other game manuals, this relation is inverted, with the screenshot serving to anchor otherwise vague and general text instructions to a situated context. In fact, the two types of images, together, perform a double anchoring: the images of Kirby performing actions beyond those found in-game anchor the text and story to a

particular, abstract notion of a game narrative and space, whereas the screenshots and crops anchor that space to the actual game at hand. While these two types of images existed in the Atari 2600 manuals, their employment escalates during the period of NES' dominance, in part due to the system's ability to create larger, more complex gameworlds that afford more possibilities for the player.

Move Lists and Menu Screens: The Solidification of Videogame Genre

The early 1990s saw the NES' dominance checked by the Sega Genesis, and, later, its own successor, the Super Nintendo. The manuals for these systems are particularly notable for two features: the stratification of the sections introduced in the NES manuals into specific game genres, and the marked difference between SNES and Genesis manuals. In general, the manuals largely employ the same foci as established in the NES, including story, character moves, levels, and enemy lists. Different manuals expanded different sections, however, and the exact form this expansion takes can largely be attributed to the stratification of games into what gradually solidified into the notion of game genres. The best way to illustrate this difference is through a comparison of two manuals from games of radically different genres, *Super Street Fighter II* and *Chrono Trigger*.

Capcom's 1994 *Super Street Fighter II* is a fighting game, with its chief gameplay centred around mastering a character's set of attacks or moves sufficiently enough to defeat all challengers. Like many fighting games of the period, it is a port, or adaptation, of an earlier game by the same name originally created as a stand-alone arcade cabinet. As such, the manual's omission of story and emphasis on varying game modes is less a throwback to the older Atari form of manual and more a consequence of the game's arcade origins, as the arcade is a platform which favors short, intense play sessions in order to maximize profit and capitalize on the faster image processing of arcade machines in comparison to consoles of the period. (The omission of story may also be because *Super Street Fighter II* is the fourth

Video game genres as a concept started long before this point; for example, in his 1982 book, *The Art of Computer Game Design*, Chris Crawford already feels comfortable enough about the variety of games available to justify dividing them into categories, based primarily around the major grouping of skill-and-action games and strategy games. What I am arguing is that it is the SNES/Genesis period where the genre division is decisively reflected and reinforced through the content and form of game manuals.

updated version of *Street Fighter II*, following the original game and sequels *Street Fighter II*: *Champion Edition*, and *Street Fighter II*: *Hyper Fighting*; it seems reasonable to conject that by the fourth iteration, Capcom decided that repeating the story was largely redundant.) The manual is fifty-six pages long, with thirty-two pages of this total devoted to a single section, entitled "The New Challengers," which is a combination of a character list and a move list, describing each character and how to perform his or her signature moves through button combinations of varying difficulty, as well as a few drawn sketches of the character and moves in action. Though some story seeps in through the text descriptions (and indeed, most of the story world-establishing elements of a fighting game are often conveyed through the background of the characters), the major focus here is on the player's relation to the game's characters through mastery of their move sets.

Squaresoft's 1995 *Chrono Trigger*, on the other hand, was a role-playing game (or RPG), and in the mid-90s, which means a focus on accumulating experience, progressing through a narrative-driven game space, and participating in turn-based combat. Its manual is eighty pages long, and is somewhat more balanced than *Street Fighter*, in terms of each section being approximately the same length. Starting from the beginning, the story section is six pages long, and includes a description of both "The world of CHRONO TRIGGER" (4-5) and a list of characters. The respective change in character list is significant; whereas *Street Fighter's* character list is embedded in the move list, suggesting that the personality of the characters is inextricably meshed with the player's mastery of their abilities, the character list of an RPG tends to be juxtaposed with the story, suggesting instead a mesh of story and character.

After the usual controls and introductory sections, the *Chrono Trigger* manual spends sixteen pages on the various subscreens of the game. The manual identifies two main screens, the field screen that arises when inside houses, towns, and dungeons, and the map screen, for moving between field screen areas. There is also the main menu screen for managing characters by checking their status, items, skills, configuration, and order; and the battle screen, where combat with monsters encountered in the field occurs. Again, these divisions are typical of an RPG, as there is a slightly different set of controls for each screen, and the player needs to be instructed on those differences. The screen descriptions are followed with fourteen pages describing the techniques and spells available to the characters in battle, a section very similar to *Super Street Fighter II*'s move list, but without the same need for dexterous mastery of the controls on the player's part. Finally, after five pages listing the game's equipment, the manual ends with fifteen pages of what it calls an "Adventure Guide," a detailed description of the first hour or so of the game, making it a mix of instruction and story.

Whereas the fighting game manual emphasized the high level of control and finesse the player would need to master a character, the RPG manuals focuses on imparting the information a player needs to function in a complex spatial exploration that is bolstered by a myriad of options and a detailed story. The two genres are expanding—albeit in very different directions—the new venues of play illustrated (literally, illustrated) in the NES Kirby game. Since *Kirby's Adventures* is a relatively late NES title, the difference cannot be explained as mere chronological difference, as there is only a single year between it and *Super Street Fighter*, and two between it and *Chrono Trigger*. Rather, the differences must be accounted for as differences in genre and differences in technological sophistication, both of which grew

much more pronounced in the jump from the NES to the Super Nintendo. In short, the manuals of *Super Street Fighter* and *Chrono Trigger* reflect the ever-increasingly technological and technical—in the sense of the technique required to play them—demands in videogames.

Manual Coolness: The Sega Genesis Instructional Manuals

Before moving on to other important game platforms during this period, it should be recognized that the manuals for the Super Nintendo and Genesis were very different, even when the same essential game was being ported to both systems, or from one system to another. Most obviously, the interior of the Sega Genesis manuals are black and white, whereas even the drabbest Super Nintendo manual usually contains colour. Further, Super Nintendo manuals tend to be longer, and contain more images. There are a few reasons for the difference: black and white manuals allowed Sega to cut corners on production costs, and the size of the manuals partially reflects the consoles' relative focus—of the two, the Super Nintendo specialized more in RPGs (role-playing games), which were longer than regular games, and tended to required more instruction.

But the black and white manual also demonstrates Sega's cultural image. At the time, the Genesis was deliberately marketed towards teenage males, as a system focused on speed, slickness, and, above all, being "cool." The instruction manual runs directly counter to that sense of coolness: a player who needs a manual is one who has time to reflect (giving up speed), a desire to passively search for information (abandoning sleekness), and, most importantly, is a player who needs a manual is one who needs help—a very "uncool" thing for a teenage male to need. In treating its manual as uncool afterthought, Sega implicitly touched on a sentiment that was soon to gain major traction in gaming communities: real gamers learn to play by playing the game. The technological elite do not need to be told how to use technology.

Manuals for Computer Games and Handheld Systems: When the Size Does Matter

On the subject of the technological elite and "uncool" manuals, the instruction manual for the computer game was also changing in this period, but it had already gone down a very different route than the minimalism of the Sega console manuals. Early computer games especially the text-based adventure games—could not match the console game's graphics, and attempted to compensate with greater narrative depth and rule-based complexity, and the manuals followed accordingly. Take, for example, Infocom's 1984 Hitchhiker's Guide to the Galaxy. At sixteen pages long, it was about on par with some of the longer Atari console manuals from the same period, but visually, it lagged far behind, as the only image is a sketched map accompanying a text example of input and output in "interactive fiction," Infocom's term for their text-based games (3). The *Hitchhiker* instructions can be divided into information on getting the game to load properly (invariably a more complicated issue for the multifunctioning computer than the dedicated game consoles) and instructions on how to interact ideally with the game's input parser, but the writing for the overall manual is filled with puns and jokes, including a fake walkthrough designed to teach the reader about interactive fiction. The walkthrough even contains a meta-moment, when the starring character Baron von Edelstein reads a book about himself and learns he is a "minor and poorly developed character in the Hitchhiker's sample transcript" (5). In other words, through a reliance on puns and metatextuality, the manual for the text-based *Hitchhiker's Guide to the* Galaxy makes up for a lack of visual flair through textual complexity, just as the game did.

Beyond just games in the text adventure genre, the PC manual, 10 on average, used

¹⁰ Accepted parlance in game culture is that PC can refer to both player-character and personal computer; while

much more text than its console equivalent. And even after the release of *DOOM* in 1993, which proved (alongside many other contemporary examples) that a PC could be an equal if not superior to console in terms of graphics, the longer manuals persisted. *The Sims* (2000) manual is 92 pages long, *Arcanum*'s (2001) manual is 192 pages long, and the flight simulation game *Falcon 4.0*, released in 2005, is a gigantic 716 pages.

The manual for Blizzard's 2000 Diablo II is a typical example. At 96 pages, it contains two dozen screenshots and at least twice that many drawn pictures, in addition to various maps and sketches, fully demonstrating the computer manual is as willing as its console equivalent to use images to its visual advantage. But beyond the basic instructions on how to play the game, there are sixteen pages devoted to descriptions on character classes, 26 pages on character abilities, and ten pages devoted to the "Encyclopedia Sanctuaria," a brief description of the game's areas and enemies. Little of this information, strictly speaking, is necessary for playing the game itself; a player playing as an Amazon can fire a fire arrow without ever knowing that, according to the game lore, the fire arrow gains its power from Hefaetrus, the "Amazonian god of fire and rebirth who lives deep within the great volcano, Mount Arnazeus, on the Island of Philios" (45). Rather, the purpose of such extraneous information is to reinforce to the player the depth of the world depicted in the game and in the story that the game provides, in part through sheer proliferation of detail. 11 The length of the manual in such terms is a measurement of the quality of the effort the designers had put into the game. The PC manual is a statement about the sophistication of a respective game that is in direct opposition to the comparatively minimalist manuals of the Sega Genesis.

this situation does have the potential for confusion, it will generally be clear in context which term is being used.

¹¹ The various *Diablo* novelizations—of which there are over a dozen—can be said to perform a similar service.

The portable handheld systems are ubiquitous enough that their manuals are also warrant a quick investigation, though their history in terms of manuals is mainly an expansion on what the consoles had already established. In general, the manuals for the portables echoed the development pattern of their home console counterparts, but in hybrid forms. The manuals for the most popular handheld device from the early to mid-nineties, the Game Boy, are only three colours, black, white and red, and are exceptionally small in width and height. The size is commensurate with the smaller game box and cartridges for the Game Boy, and nearly all later manuals for handheld systems have a similarly reduced size. The manual's fewer colours could be interpreted as an attempt to avoid overshadowing the monochrome Game Boy monitor display. It also serves a similar rhetorical role as the third phase Atari manual: it signals that its games are simple, cheap, and somewhat marginal in comparison to other console systems, and these first two items in particular were selling points for the Game Boy and its cartridges.

However, the Game Boy manuals are not simply smaller versions of the Atari form, despite the possible similarities between the Atari 2600 and Game Boy in terms of visual sophistication; the manuals also reflected the genre solidification of the home console systems. A good example of this genre emphasis is the manual the 1990 Game Boy RPG *The Final Fantasy Legend*, which uses only three colours, but is also eighty pages long (an almost unheard of length for a handheld game manual), containing sections explaining the submenu and battlefield, a long list of items and spells, and an "Adventurer's Log" that details the early game and spans over thirty pages, written in a diegetic tone as if it were composed by a narrator from within the game. This manual contains not only the aforementioned sections of the RPG genre, but the extensive, diegetic walkthrough portion also mirrors the world-building

descriptions of the PC manual. *The Final Fantasy Legend* manual demonstrates that Game Boy manuals were bound by the technological limitations of the Game Boy, but also responded to trends in other types of contemporary game manuals. The manuals for later handheld systems operate in a close lock-step with their console equivalents, with the exception of the smaller manual dimensions that were more in line with the smaller cartridge (or disc, in some cases) size; consequently, it is the conventions for later console systems that need to be established.

3D Navigation and Online Play: The Instruction Manual's Twilight Years

To return to consoles, the late 90s and first few years of the twenty-first century saw instruction manuals largely holding steady in the direction that 16-bit consoles set. Again, there was some variation between systems: manuals for the 1996 Nintendo 64 (N64), especially for first party games made by Nintendo itself, tended to be very expansive visually, whereas the 1995 PlayStation (PS) manuals tended to be more formulaic (with some notable exceptions, which will be discussed later). The PS manuals were also similar to the manuals for the handheld systems, in that they were constrained in terms of both dimension and size by the logistic that they had to fit inside a small CD case. Unlike the handhelds, this reduced size was not to signify the size and cheaper value of the games, but their technological superiority. While the PS was not the first mass console system to use compact discs over cartridges to store games—Sega, for example, had experimented with the Sega CD peripheral in 1992 and the 32X in 1994 to little commercial success—it was the first massively successful system to use the format. Making the cases the same size as CD and CD-ROM cases created the rhetorical impression that the PS was ahead of the technological curve. The next generation of game consoles also modelled the materiality of game cases on existing, state-of-the-art technology, as the cases for the 2000 Play Station 2, 2001 Nintendo Gamecube, and 2001 Xbox all resemble DVD cases, and the respective manuals' dimensions were enlarged proportionally. In this case, the instruction manuals reflected not so much the technology of the games per se, but the technology with which the marketers of the games wanted to be associated.

But despite the difference in dimensions, in terms of content, the manuals tended to be very similar to those of the 16-bit era. The firm genre differences persisted, and some of the

differences between console and PC manuals started to disappear as PC games were increasingly ported over to consoles and their manuals transferred unchanged, excepting small alterations regarding the sections on system management. In terms of the actual games, one of the biggest changes is that fully 3D worlds were now possible because of technological advancements. Manuals for games made in the early stages of this new technological feat, such as the one for the 1996 N64 game Super Mario 64, devoted sections of the manual to control of the 3D camera, but as players became accustomed to 3D gameworlds, this section stopped being included. As another result of the popularization of 3D worlds, first person perspective games, previously an infrequent novelty, became commonplace. Under a first person perspective, the character's avatar is seen less frequently by the player, and complex physical moves, such as the triple jumps and backflips in Super Mario 64, become increasingly difficult to perform and follow visually. As a result, the manual for a 3D, first person game tends to have fewer graphic representations of the character, and a greater focus on items, weapons, and character abilities that do not involve visually complicated body movement. In short, the new technological affordances of the 3D game design had a direct impact on the content and visual focus of the manuals.

There are two other notable manuals changes in the latter part of this period, which are arguably related: the new inclusion of multiplayer sections, and the reduction of story-oriented information. Playing with or against someone in the same room has always been commonplace in gaming, whether it was via the multiple controllers of the console games, or the local area network (LAN) parties of the personal computers. But with the proliferation of the Internet, online gaming became possible, and this option meant a new section in manuals. For console

games that had multiplayer options in addition to a single player game, the online section usually came near the end of the manual, and tended to be rather lengthy; in the manual for the 2004 PS2 Ratchet & Clank: Up Your Arsenal, the online multiplayer instructions are fourteen pages long, and comes after common elements such as story, items, and weapons. The implicit statement is that the online multiplayer component of the game is distinctly separate and supplementary from the single game experience, due to its placement away from the rest of the matter, but at the same time, it is complex and developed, by virtue of the section's length. The manuals for PC games designed for online play, particularly those in the massive multiplayer online (MMO) genre, approach the issue differently, treating online play as a matter of course rather than a complex secondary feature. The 1999 Asheron's Call manual (a manual for one of the earliest MMO games) merges the connection to online instructions with a four page section on set-up in general, and it comes at the beginning of the manual, immediately following the general story overview; the manual lists the in-game help menu and the company's website if the player requires further aid, and the rest of the manual is on general gameplay and establishing the lore of the gameworld. The implicit message is that the instructions required to play the game are best contained in the game itself.

In a development that may be related to the renewed focus on players interacting with each other rather than the gameworld, the portion of the average game manual devoted to the game's backstory is reduced in this period, even though the total page count remains more or less the same. The 1998 *Legend of Zelda: Ocarina of Time* for the N64 is 44 pages long, with four pages of backstory—and only that much if one counts the two page spread of the world map and character list. But the earlier 1988 *Zelda II: The Adventure of Link* is 54 pages, with

twelve pages of backstory. When the difference in page dimensions between NES and N64 is taken into account, the actual length of these text segments is much closer, but Zelda II still has a much longer story section than Ocarina of Time in terms of the section's proportion to the rest of the manual, despite the comparative simplicity of its narrative. Even games that are more definitively in the RPG genre, a genre usually noted for its story, have manuals with greatly reduced story sections in this period. The 2002 PS2 game Kingdom Hearts and the 2001 PS2 game *Final Fantasy X* are narrative-heavy games, but their manuals omit the story sections entirely, in favour of brief character descriptions. A possible interpretation, rather than publishers simply trying to reduce costs by printing smaller manuals, is that this reduction is because of the increased story-telling potential of the actual game, that with the increased technological sophistication allowing games to insert extended CGI cutscenes and voice clips, the game could now tell its own story, without recourse to the print medium of the manual. But however the reduction is interpreted, the stories in the instruction manuals by the middle of the first decade of the twenty-first century were becoming increasingly broad, sometimes disappearing altogether.

"Increasingly broad, sometimes disappearing altogether" is an apt description for the current, and most likely, final, phase of the video game manual, in physical form at least.

Starting about six years ago with the current generation of systems, such as the Xbox 360, the Wii, and the PS3, the videogame manual underwent a rapid degradation. In terms of sheer size of the manuals, Konami's *Silent Hill* series demonstrates the reduction. The 2001 *Silent Hill* 2 and the 2003 *Silent Hill* 3, both for the PS2, number 28 and 20 pages, respectively. While both are much slimmer than some other Konami manuals, most noticeably the *Metal Gear Solid*

series, their length is still more or less typical for a survival horror game where the story elements are kept inside the game. In contrast, the manual for the 2012 *Silent Hill HD*, which combines the two games in a remastered edition, is only eight pages long. Various arguments exist for why videogame publishers have reduced the size of manuals. Ubisoft, in 2010, declared that it would eliminate manuals altogether for its games, claiming that such costs create a more eco-friendly product, and EA Sports followed suit in 2011. In fact, Electronic Arts has recently declared that it is going entirely digital, bypassing boxed retail versions of their games entirely (Lynch). And as with the black and white Genesis manuals, lowering production value on manuals lowers overall costs, a valid concern in an industry where videogame profit margins can be razor-thin.

The arguments from the publishers are complemented by those from the players, as there is a sense that the manual is no longer necessary. Thread poster project84music, speaking at the sixthaxis thread in response to EA Sports' announcement sums up the general response: "I think this is a good step in the right direction. Personally, I find that most of the information is in the game and very rarely look through the manual as it is." Another user, Sympozium, agrees: "Meh a few games are too simple to understand now and er... manuals are pretty much useless" (Lee). Player sentiment is that they know more about games and game types than they used to, and long descriptions on how to control the camera or enter a room are not necessary. More importantly, they claim, games have integrated anything the manual needs to say, through in-game tutorials and help menus.

With both players and publishers now abandoning the instruction manual, we have come to the apparent end of its history and existence. The technological progressivist version

of game manual history is now complete: they were created to help players come to terms with this new media form, they changed and evolved to reflect the technological sophistication of the games, and when the games' sophistication reached a point where they could do anything the manual did, the manual faded away, its task complete. Rendered obsolete, the video game manual is a dead media form.

The Variantology of the Videogame Instruction Manual

Such a view of the videogame manual is accurate in the broadest sense, but it also reinforces some possibly dangerous perceptions regarding technology. In the 1990s, scholarship regarding the new digital technology was extremely enthusiastic about its potential, with an optimism that boarded on utopian, if not outright hyperbolic in concern with the medium's potential for radical change. In both popular press and academia, there is a tendency for those who follow videogames as well to indulge in a narrow focus on new technology and new games, so that the past is always just a stepping stone to the future. In the extreme form of this view, the ultimate aim of a videogame developer is to create a game with the most advanced hardware using the most sophisticated visual and audio representations, and anything that came previously is an imperfect realization of this ideal game.

Opposed to this view is the media history methodology proposed by Siegfried Zielinski. Zielinski argues that the study of dead ends can be fruitful in its own right, especially if we consider them not dead ends, but variants. Based on Foucault's archaeology, the study of variants—or variantology, as Zielinski calls it—looks at media history not in terms of a technological advancement, but as a series of experiments and explorations of paths not taken. To quote Zielinski, variantology is a "history that entails envisioning, listening, and the art of combining by using technical devices, which privileges a sense of their multifarious possibilities over their realities in the form of products, cannot be written with avant-gardist

See for example installation artist Nicole Stenger: "without exaggeration, cyberspace will be seen as the new bomb, a pacific blaze that will project the imprint of our disembodied selves on the wall of eternity" (51) and "[Cyberspace's] eternal present will be seen as the Fountain of Youth, where you will bathe and refresh yourself into a sparkling juvenile" (56).

pretensions or with a mindset of leading the way" (*Deep Time* 27). ¹³ Such an approach to history justifies a study of game manuals that considers them as more than a reflection of technological advancement, cast off when no longer needed. Rather, it calls for a study that considers their "multifarious possibilities."

In other words, a variantology-based investigation of instruction manuals should begin by considering the functions and purposes that a manual serves, including, but not limited to, instruction. A good starting point for such an approach is the detailed defense of instruction manuals designer Chris Crawford made in his seminal 1984 book, *The Art of Computer Game Design:*

One of the final tasks you must perform before releasing the game is the preparation of a game manual. Manuals are given too little attention by almost everyone associated with computer games. This is a serious mistake, for the manual is a vital element in the overall game package. Computers have many limitations, and some of these can be overcome with a good manual. Much of the static information associated with a game can be presented in a manual. It is also an excellent place to add fantasy support elements like pictures and background stories. Finally, a well-written manual can clear up many of the misunderstandings that often arise during a game.

You should write your own manual for a game, no matter how poor a writer you are, and even if a professional writer will prepare the final manual. The attempt to write your own manual will increase your respect for the skills of the professional writer, making it

Though Zielinski disavows "avant-garde pretentions" and "a mindset of leading the way," he has been criticized for not living up to these standards. Parikka, for example, finds that Zielinski focuses overmuch on a progression of heroes, particularly a "history of *male* heroes" that is at odds with Zielinski's claim to move away from established histories, and suggests Zoe Beloff's work as more in the original spirit of variantology's purported goals (*What is Media Archaeology?* 52-53).

more likely that you will have a productive relationship. Writing your own will also give you a feeling for the cleanliness of game design—clumsy designs are hard to describe, clean ones easier. The manual is, after all, a rephrasing of the game design and thus allows access to the game design from a fresh perspective. If a particular game feature requires cumbersome and tedious explanation, that should warn you that the game feature is itself cumbersome. Finally, your own manual will be a useful source document for the professional writer. You should be prepared for the writer to throw out your manual and start over. A good writer would rather create a new manual than polish an amateur's crude efforts. You must cater to the writer's needs, answering all questions as completely as possible. Only a close and supportive relationship between designer and writer can produce an excellent manual. (74)

The comments on the designer/writer relationship date the passage, as it comes from a period in game design where the design team was rarely more than a half dozen people, making such relations simpler. But it still suggests a number of potential purposes served by the manual beyond simple instruction. Crawford argues that manuals are useful to the game designer, as a personal re-investigation of the underlining design principles in the game, and useful to the professional writer as a source document. For the player-reader, the manual serves three purposes: to present static information that would be boring or inconvenient to read off the screen; to correct misunderstandings that arise through playing the game (a function significantly different from straight instruction); and to add fantasy support elements. Even in 1984, a period when Atari was still making manuals whose page count rarely went into the double digits, there were developers who recognized that a manual did more than instruct.

Crawford's outline of a manual's purpose is somewhat limited, however, by his focus on how the manual is only relevant to the immediate game. While this connection is certainly significant, a manual is also part of a larger social context. To establish how these contexts proliferate and differ, Gerard Genette's term paratext is useful. By Genette's definition, paratext is that which functions on a text to "make present, to ensure the text's presence in the world, its 'reception' and consumption in the form... of a book" (1). A text's paratext is anything that affects the way its audience or public interprets and consumes the text, including the elements printed with the main text (the peritext), such as title, preface, author's name, but also external elements (the epitext) such as press releases, book reviews, and interviews. As that list may suggest, Genette deliberately defines paratext rather narrowly, to describe only texts and discourses that bear on specific books, and further, only the elements of a book sanctioned by the author or publisher. Other scholars have extended the term significantly; Jonathan Gray has applied it to film and television, and the idea has been utilized by game scholars such as Mia Consalvo and Steven E. Jones to refer to all of the extra material that alter the meaning of a videogame. In a case of a game, a paratext can include everything from the title screen, to the game's packaging to the models staffing a booth at a game show or a video parody constructed by a fan on YouTube. In light of that rather diverse field, the videogame manual is a rather modest application of paratext, but paratext is still a useful way of conceiving of the manual. As paratext, the videogame manual alters the interpretation of a videogame through a number of different variants (to keep in mind the variantological connection), up to and including the ways different manuals shape initial reception, employ other forms of media insert textual humour, and reinforce the existence of the gameworld.

In his book Show Sold Separately: Promos, Spoilers, and Other Media Paratexts, Jonathan Gray distinguishes between gateway paratexts that work to introduce an audience to a certain media product, and in medias res paratexts, which re-establish an audience's connection to a media product. The previously mentioned Super Mario Bros. 3 manual functions as both. As in medias res paratext, it quickly establishes that it is carrying player-readers to a familiar place, as when Mario states "It's been such a long time since we've seen each other" (3). And at the same time, the manual acts as a gateway, explaining Mario's abilities and the general SMB3 game to those unfamiliar with the franchise. Gerard Genette defines paratext particularly as "threshold," as a fringe zone "between text and off-text, a zone not only of transition but also of transaction" (2). The SMB3 manual fits this definition better than most manuals (and indeed, most paratexts) through its aforementioned confusion between player and character. By addressing a player that is definitely not Mario and yet somehow contained within the gameworld, the manual acts as Genette's threshold or zone of transition, by taking the player into the game, but also as transaction, by impressing on the player the implied agency of Mario (through the proliferation of his image and abilities) and the Koopalings (through their direct address to the reader). And while the SMB3 manual is more explicit in performing these functions than most manuals, there is an element of paratextual threshold present in nearly all of them.

It is fairly common for the videogame to expand its fictional world through paratexts that have long been used as mediums to depict their own fictions. Often, these paratexts constitute complete texts in their own right. Videogames as diverse as *Super Mario Bros* and *Resident Evil* have spawned a number of films, usually to the derision of critics. Franchise

game series such as *Diablo, Fable, Gears of War*, and *Mass Effect* are frequently subject to novelization, as well as entirely new fictions set in the general world depicted in the games. It is unsurprising, then, that many videogames have been adapted into comic book form, including the aforementioned *Super Mario Bros* and *Mass Effect*, but also *Halo, Mortal Kombat, Silent Hill*, and *Assassin's Creed*; the most impressive example is probably the *Sonic the Hedgehog* comic, based on the game series of the same name, which has been in continuous publication since 1993, with over two hundred issues. With rare exceptions (early issues of the *Sonic the Hedgehog* comic, for example, explained how to perform a "super dash attack"), the paratexts almost never address the process of playing the game, and instead expand purely on the narrative aspects of the gameworld, often adding elements and characters beyond the scope of what can be found in the actual game, or games. These paratexts are almost always secondary in nature, in that they are not intended to be necessary to play the game, but instead exist to add extra value and meaning to those who already consider themselves fans and players of the game in question.

The relation changes significantly when attention is turned to comic books that are packaged directly with game and manual, an association that creates a tighter paratextual connection than the standalone form. Simple examples include the five page insert that accompanies the manual of the 2006 Game Boy Advance game *Drill Dozer (A Girl and Her Dozer)*, and the fourteen page section of the manual for the 1992 Sega Genesis game *Flashback: The Quest for Identity*. The two employ radically different visual styles, as *Drill Dozer* uses manga-influenced characters and cartoonish shapes, and *Flashback*, penciled by

There is nothing, besides production costs, that limits other paratextual media, such as film and novels, from being included with the game as well, but comic books, given their relatively short length and adjustable size, are by far the more common inclusion.

comic book artist Mike Harris, bears more than a passing resemblance to Marvel Comics house style, circa the early 1990s (Moore). But both serve the same basic function, acting as extended prologues or backstories for their respective gameworlds. An obvious theoretical reference for such incorporation is Bolter and Grusin's notion of remediation, which describes how new media differentiates itself from older forms by making itself appear more transparent (immediacy) or by drawing attention to its multiple layers (hypermediacy) (5-6). In the cases of *Drill Dozer* and *Flashback*, the remediation draws on a bit of both, trying to offer a transparent glimpse into the story of the gameworld, while still relying on the hypermediate implication that the game's story—and by extension, the player's experience of the game, can be interpreted in a similar fashion to reading a comic book.

But the immediacy-hypermediacy spectrum is insufficient to fully capture some of the more subtle cultural references embedded in a given manual, as three case studies will demonstrate. First, the comic book insert for the 2005 PS2 game *Ultimate Spider-Man* illustrates that the incorporation of a comic book can be more than just a general reference to the cultural capital (to borrow a term from Pierre Bourdieu) associated with the comic book medium. The fifteen page comic book describes the origin of the final boss of the game, Spider-man's long-time foe, Venom, which gives it a function similar to the backstory establishment of *Drill Dozer* and *Flashback*. The difference is that the comic book here is a compilation of scenes taken directly from the *Ultimate Spider-Man* comic book series, and is thus written and illustrated by the series' regular team (at the time) Brian Bendis and Mark Bagley. To strengthen the connection, an advert near end of the book informs interested readers the volume of *Ultimate Spider-Man* to purchase for "the entire Venom saga," and the book's

cover is constructed in the same visual style as the covers of the regular series, with vertical stripes on the sides.

The comic book manual turns the video game and comic book series into reinforcing paratexts: for the audience of the game, the comic book series becomes a paratext for expanding the gameworld; for the audience of the comic book series, the game is a paratext allowing them to participate in the comic book world. And the advertisements in the comic book, for other Marvel-based movies adapted into videogames including *Fantastic Four*, and *Spider-Man 2*, add yet another layer, encouraging comic-book loving videogame aficionados to "Play the Game. See the Movie." Though this comic book is nothing but a conglomeration of previously published materials and advertisements, it does more than just remediate the comic book in an instruction manual setting; it creates a tight web (pun intended) of consumer product and audience experience.

Ultimate Spider-Man, however, was not the first instruction manual/comic book hybrid to attempt to fuse an expanded game narrative with product synergy. Twenty years earlier, Atari tried something similar with their Atari Force series. In the early 1980s, both Atari and DC Comics were owned by Warner Communications. It was a matter of creative synergy, then, that led to DC writers Gerry Conway and Roy Thomas and several established DC artists to create Atari Force, a comic book series whose issues were packaged with Atari games Defender, Berzerk, Star Raiders, Phoenix, and Galaxian. The basic plot of the series is that the titular Atari Force--"Atari" in this case being the recursive acronym for Atari Technology and Research Institute—has been granted the mission of searching the multiverse for a new home for humanity after Earth, in the near future of 2005, has been irradiated in the "five day war."

And in the process of this search, the Atari Force team runs into a series of alien invaders loosely based on the games with which the issues are packaged. In this case, then, the comic inserts create a unity not with an outside comic book universe, but between Atari's own published science fiction-based games. The games themselves—all ports from other platforms to begin with, and thus not designed with an Atari connection in mind—do not recognize this joint fiction, and only the manuals for *Star Raiders* and *Galaxian* refer to the comics, with oblique references to Atari Force's leader, Captain Champion. But the mere existence of the comics creates a new paratext for the games they come packaged with, suggesting to players that the games, under the Atari banner, have a unity to them beyond just their original (usually) arcade settings. The *Atari Force* comic series was more than just an exercise in brand consolidation; it was an attempt to draw out the similarities between generic conventions in the comic book and video game mediums and fuse them into something that would resonate with a broader audience.

When the comic book sections are merged more directly with the instructional purpose of the game manual, the result is usually a strange hybrid, as in the *Super Mario Bros 3* manual, where characters that are otherwise the player's enemies alternate between posturing and offering general advice. The *Metal Gear Solid* series takes a more integrated approach. Starting with the sequel, each manual in the series features an extended comic book sequence in which series regular Otacon explains some of the controls to the character the player will control. In their in-depth study of *Metal Gear Solid*, Nick Dyer-Witheford and Derek Noon argue that the game both embraces and rejects its military, aggressive roots, all the while indulging in metacommentary and self-reflexivity (92). While the same degree of engagement

cannot really be replicated in a twenty-four page section of an instruction manual, the comic book sequence speaks to the nature of the game, in both its visual form and content. The heavy use of black in the opening panels of the *Metal Gear Solid 4* manual's comic section reinforces the game's status as a stealth-based game, rather than a bright, explosion-laden action game. It also maintains the game's commitment to humor with its ending, wherein a rebel soldier expresses his love for Snake with a giant heart word bubble. Throughout the section, the ongoing conversation between Snake and Otacon, where Snake relies completely on Otacon's instructions, establishes the dynamic of their relationship and the trust the characters feel for each other, even though this particular interaction would and could never take place in the gameworld proper. Finally, the Metal Gear Series, especially the fourth game, were known (and often criticized) for the emphasis on cinematic cutscenes and conversations over gameplay action. The manual's use of a narrative for explaining how the actions are to be performed signals to the player that every aspect of the game is part of the story, whether there is a cutscene going on or not. The comic book instructions presented in the manual frames the overall game as one long, all-encompassing spy story, always immersed in narrative and action.

Of course, the comic book is not the only medium that an instruction manual has to draw on, nor is it the only one that can utilize image and text in tandem to exert its rhetorical influence. The children's literature genre of the picturebook has also been incorporated and remediated into the instruction manual's form. Nintendo's manuals, in particular, are prime candidates; as stated earlier, Nintendo has been deliberately targeting a child demographic from the time of the Nintendo Entertainment System on, and the manual designs play their own part

in that in the way they deliberately embrace an aesthetic that is best described as childlike. Earlier, I noted the multitude of images of the cute and fluffy Kirby in *Kirby's Adventure*; the manuals for other games in other Nintendo games also feature similar aesthetics, such as the crayon-scratched backgrounds of *Super Mario World 2: Yoshi's Island*, the pastel colors of *Kirby's Dreamland 3*, and the wide-eyed helper/fighter creatures of the *Pokémon* series. In fact, videogames in general have long been borrowing the anthropomorphic page from the picturebooks, with protagonists such as Sonic the Hedgehog and Crash Bandicoot, and animallike aliens such as Jak and Ratchet, from the *Jak & Dexter* and *Ratchet & Clank* series, respectively. Granted, these figures are somewhat different the typical picturebook animal in their propensity for violence and firearms, but the basic point remains: videogames, and by extension, their manuals, are quite willing to draw on conventions established earlier in children's picturebooks.

But there are also manuals that draw on the picturebook format and structure, rather than simply echoing some elements of its basic style and motifs, such as that for an Atari 2600 game *Oscar's Trash Race*. Released in 1983, *Oscar's Trash Race* can be viewed as an early entry in a videogame genre that was described by a portmanteau had just been coined: edutainment, videogames meant to also be educational. The game itself was based on a very simple counting mechanic, where players counted the number of objects that were dumped from a dump truck, then sent the grouch whose can matched the number of objects to go pick them up. The manual, in comparison, was much more complicated. In *How Picturebooks Work*, Nikolajeva and Scott state that picturebooks are written for a dual audience of "small children and sophisticated adults" (21). In the *Oscar* manual, this division is explicit, the parents at the

beginning of the manual, and further notes throughout the manual, marked by an icon of a stick figure adult and child. At the same time, the contents of the manual and the crayon-style headings suggest a child reader. Rather than assuming a monolithic player-reader, the manual addresses multiple audiences. The set-up instructions are aimed at the usual "general" audience of the generic Atari player, but the background story section is clearly aimed at children. It is also clearly different from a typical Atari story section of the period, as it is much longer—five pages long—and is presented as a picturebook directly, with static images appearing alongside textual narratives. In this case, the pictures reinforce the main activities of the game, as they call on the reader to match the verbal numbers and objects with their visual forms.

Sections typical to the second and first phase Atari manuals follow, including descriptions of the basic gameplay and a run-down of the gameplay variants. But the rest of the manual is less a picture book and more an activity book, asking children to do activities such as drawing a lunch for the grouches, composing a story out of wordless panels, matching objects and numbers, and searching for objects in a city dump. In each case, the manual breaks away from traditional instruction manual form by asking players to act not just in the game, but directly on the manual itself, performing the same sort of counting and identifying that constitute the core mechanics of the game. The manual ends with another usual Atari manual feature, a chart outlining the possible variant modes, but this section too has been modified for the benefit of a younger audience. Rather than the usual rows and columns, the matrix uses what information design theorist Edward Tufte calls multiples, a set of similar images that draw readers' attention to the small differences between them (110). In this case, each picture features a trash can with legs and represents one variant of play; a worm in the bottom left of

the picture indicates a timed game (in the game, time limits are measured by a worm that crawls from the left to right extreme of the screen), and a puddle in the bottom right, which can be blue, on rainy days, or simply brown, indicates the type of obstacle in that game variant. From the backstory illustrations to the variation chart, the *Oscar's Trash Race* manual borrows from genres of children's literature to make its instructions more approachable for its child audience.

The manual for *We Love Katamari*, a 2005 Namco game for the PS2, also uses picturebook aesthetics, but to a very different end that reflects its very different audience. The *Katamari* series is centered around its core game mechanic and premise: the Prince of All Cosmos has been assigned by his father the King the task of pushing around a ball (the katamari) that picks up items smaller than it to form a larger ball (or again, katamari). In his book *Gamer Theory*, McKenzie Wark devotes a chapter to the first *Katamari* game, *Katamari Damacy*. He declares that the Sisyphusean labors of the Prince imposed by the King are the same as the labors that the game, and digital technology in general, imposes on the player:

It is no longer labor as punishment for defying the Gods. It is no longer absurd labor, performed consciously and joyously in spite of the absence of the Gods. Topology installs, in place of the absent Gods, King Digital, and his demand that, while labor is punishingly hard and absurdly pointless, it nevertheless has its measure (99).

In other words, rather than playing for fun, players of the *Katamari* series (and by extension, game players in general) are laboring to make digital progress, or rather, to fill a digital progress bar, and accumulate a meaningless score. Steven E. Jones, in *The Meaning of Videogames*, argues that what is missing from Wark's account is the player's experience, and

the way the game creates this sense of play (53). For my part, I argue that the manual has its own role in encouraging a playful engagement, and it does so by directly drawing attention to its resemblance to a picturebook.

The manual for the first *Katamari* game, *Katamari Damacy*, exerts a general call for play through unusually bright, solid colors and cartoonish pictures of the characters, but the manual for the sequel, We Love Katamari, goes further. From pages 4 to 25, every image is spread out over two pages, with the subheadings appearing in big round letters. The first two such illustrations are not unusual for an instruction manual, even if they use more than the common amount of visual flair; the first depicts the game's backstory, a section of the manual which often uses unconventional imagery. And the second is essentially the equivalent of a labeled screenshot of the basic game, another common element, though this picture is different than most, as instead of a screenshot, the player-reader is faced with an actually a labeled drawing. From pages 8 to 21, however, the game describes its controls, and text and image start performing unusual and entirely distinct tasks. The text is exceptionally sparse, sticking purely to a list of commands; the sole instruction-based piece of information on the page 13 is "[Brake] Press both sticks in the opposite direction that the katamari is heading," a decidedly uneconomical use of space if conveying information is the primary function of the manual, and the rest of the text is similarly spaced out and terse. The pictures, however, tell a complete narrative, and are backed up by short, simple larger text subheadings, kept distinct from the instructional text by their larger size and bulbous letters. In the pictures, a humanoid fox pushes a katamari and is joined by a pink rabbit in purple pants, a bear in a leather jacket, a roller blader, and a human-sized apple; the accompanying subheadings comments on the situation by

saying "Faster! Faster!" (14) and "Get a Move On!!!" (15). The group is then chased by an alligator, and ambushed by the boogeyman. A final illustration shows all characters in a circle pushing katamari of their own, with the apple in the center, perched on a katamari and somehow playing the guitar. In this surreal scene, the instructional text merges with the image narrative, and its declaration in the upper right corner ends the interlude: "Everyone gets along when you roll the katamari like this" (21).

Unlike the case in the backstory section of the *Oscar's Trash Race* manual, this section is not just a picturebook that was transplanted into an instruction manual. While the absurdist story and its minimalist blocky text would not be out of place in a children's picturebook, the smaller text instructions would be. More to the point, the game was not designed with a child audience in mind. The control section here is doing something beyond explaining the mechanics of the game to children. In picture book related scholarship, one of the key issues is how the image and text can be used in contrast to express differing ideas. Scott and Nikolajeva outline eight different counterpoints, including image and text pairings that differ in perspective, cases where the pictures and words present address different audiences, and cases where the text and image juxtapose different events entirely (24-26). All three of these pertain to some extent to the case in *We Love Katamari*'s manual, but it is Perry Nodelman's assessment, in *Words About Pictures*, that provides a more complete answer. The eighth chapter of his book describes the case where text and image differ as irony, and he identifies two types:

Two specific sorts of irony which develop when words and pictures come together in narratives are inevitable, because they are inherent differences between verbal narration and pictorial depiction. The first is the distance between the relative objectivity of

pictures and the relative subjectivity of words; the second is the distance between the temporal movement of stories and the fixed timelessness usual in pictures. (228-9)

A further irony exists in this particular case, as the poles Nodelman describes have been reversed. The words function in an objective, timeless manner, while the pictures depict the unfolding events of a specific case. But the basic irony still stands, and informs the player.

Longtime player-readers know that these pictures are not the typical accompaniment for simple instructions, and so interpret them in the same that Jones claims they interpret the game: with a sense of play. The instruction manual plays with other genres to confirm the style and mentality of the game.

The manuals just discussed acted as paratexts for their games by reframing the games in light of already established mediums such as picturebooks or comic books. Other manuals use a more direct rhetorical strategy, one that comes from the early days of the console game, returning where we started with the Atari 2600. In 1979, a group of disgruntled Atari programmers left the company and formed their own group, Activision, becoming videogames' first third party developer. In most ways, both the Activision games and manuals were reasonably similar to their Atari counterparts, but the manuals differed in two key ways. First, nearly every Activision manual challenged the player not just to reach a high score, but to reach a specific high score, in order to be inaugurated into a special club, and a badge signaling this achievement would be given to the player if he or she sent in photographic evidence of reaching this high score. Many Atari games of the period kept track of the player's score, but Activision was one of the few to offer a material reward for the achievement. Second, every Activision manual of the era ended with a personal message from the designer, offering special

tips, behind the scenes commentary on game development, and a general call for any comments. As an example of these two sections in effect, the 1983 game *Pressure Cooker* offers players who achieve 45, 000 or more points enrolment into the Activision "Short-Order Squad" (*Short-Order Sam's Famous Fast-Food Cookbook*). And on the last page, Garry Kitchen, the game's designer, tells us that he loves to cook hamburgers, and offers a few tips he likes to use in the game to "keep the customers happy and take some pressure off myself." The encouragement and tips are preceded by a photo of Kitchen, and his signature adorns the bottom of the page, lending a visual authenticity to his words.

To delve into why these extra manual elements are significant, we need to go beyond the concept of paratext. Mia Consalvo, in her book *Cheating*, takes Pierre Bourdieu's notion of culture capital and coins the term "gaming capital" to describe the way players position themselves within the general playing community (4). This gaming capital, she argues, extends to the game publishers as well, and she demonstrates her point with a detailed study of the game magazine *Nintendo Power*. By choosing games for review, and others for in-depth strategy guides, by creating scoreboards for player achievements and sections for player tips, *Nintendo Power* created a model of what it meant to play a game, and what it meant to be an ideal player (25-33).

Viewed in terms of gaming capital, the Activision Atari manuals predate *Nintendo*Power in creating a nascent sense of what it meant to play a game in general, and Activision games in particular. In these manuals, we find a careful establishment of gaming capital, and an articulation of not just what makes an ideal game and player, but also what makes an ideal designer. This emphasis on the designer was directly opposed to the common Atari practice; in

fact, Atari's refusal to give credit to the game programmers/designers (the two roles were more or less identical at the time) was what lead the programmers to leave Atari in the first place (Herman 65). The manuals' inclusion of the programmer message and profile is a statement, then, on the importance of the programmer's role in relation to the identity of the game, and the desire to ensure that the player being aware of that relation. The ideal player in this configuration is the one who has earned the most Activision badges, as she has not just gotten into the high score echelon, but has purchased a great number of Activision titles to do so. But the ideal designer, as Activision presents it, is one who is both a master gamer and a master designer, someone who has a passion and a history in game design. The *Crackpots* manual, for example, states that its designer "grew up in a family of game designers and computers," and he was "designing games right out of high school"; the *Robot Tank* manual tells the reader that Alan Miller is "One of the 'giants' in the field" (Code Name: Robot Tank) and creator of Checkers, Tennis, Ice Hockey, and StarMaster. These ideal designers can present tips to the player, framing themselves not just as gamers, but as superior gamers, those who know the game well enough to offer sage advice. And by framing the gameplay experience in this context, the Activision manuals reconstructed the player-designer relationship so that it was a difference of degree, rather than of kind. The great players get the emblems, the manuals suggest, but the best players go on to make games.

The variant manuals mentioned so far that set themselves apart from the general history of videogame manuals did so by either incorporating image and text configurations established in other media such as the comic book or picturebook, or by linking the game to the authority and authenticity of the designer. Before this discussion closes, there is one other manual variant

worth discussing: the videogame manual that attempts to present itself or a part of itself as a found object from within the gameworld. To put in Bolter and Grusin's terms, such a manual is drawing on the concept of immediacy, attempting to frame its instructions as if it were offering a transparent window into the game. The Super Mario Bros 3 manual again offers an example, as its introductory message from Mario is framed like a mailed letter, complete with a stamp of a mushroom and postage stamp of Mario in a Tanooki suit (3). Framing the introduction and backstory information as a letter is a fairly common tactic, though it is usually not addressed to the character but to characters in the game, to preserve the illusion that this portion of the manual comes directly from the game. For example, the 1983 game Jungle Hunt for the Atari 2600 begins with the culturally questionable notice for all cannibals in the area that the soup de jour is English Woman Broth, spurning the player character Sir Dudley Dashly into action (1). Similarly, sixteen years later, the backstory to the 1999 N64 game *Pokémon Snap* is a letter from Professor Oak to the PC Todd, asking him to come to the island and take pictures, emblazoned with the Pokémon Laboratory stationary (4-5). In the general history of instruction manuals, Atari manuals went from being focused on the game and game variants to gradually spending more time depicting the backstory of the game, and the gameworld (or at least the game's various stages). The instruction manual made to reflect and reinforce the gameworld takes that approach and extends it even further. As a few examples will show, these manuals used image, text, and some cases, image and text, to reinforce the aesthetics and reality of the game for which they serve as paratext.

The degree to which a manual attempts to connect to the gameworld it refers to varies greatly. On one side of the spectrum, we have manuals that simply reinforce the visual

aesthetics of its gameworld by echoing its style through images. We have considered a few cases of this already in different forms, as in the proliferation of Kirby images in *Kirby* games, and the dark images of *Metal Gear Solid 4*. In fact, it is reasonably rare for a manual to go entirely against the visual style of the game to which it refers. Some manuals, however, go further than others in supplying this visual support. The multiplatform 2003 Ubisoft game *Beyond Good & Evil* revolves around freelance journalist Jade attempting to set herself against a large corrupt corporation. The manual for the PS2 version of the game reinforces this position aesthetically by presenting itself visually as a product of freelance journalism research, with its screenshots framed as photographs, its page numbers made to look like bits of paper stapled to the main page, and the headings presented in broken block black and white. At no point does the manual actually claim to be Jade's records, but simply by looking as those records might, they reinforce the player's subject position upon entering the gameworld.

A variation of this visual reinforcement are game manuals that attempt to convey some sense of the gameworld in terms of the virtual space it occupies. Henry Jenkins has argued that when referring to storytelling in videogames, it is best to consider it as narrative architecture, the way a story unfolds through the player's exploration of space, and instruction manuals have long been trying to convey some sense of that exploration (121). In many manuals, that attempt consisted of nothing more than a description of the game's stages, and a few accompanying screenshots. Some try, again, general aesthetic appeals, such as the location-based backgrounds of Game Boy Advance version of *Donkey Kong Country 2*, using jungles, swamps, and beaches among other locales. A particularly innovative example is the manual for the PS2 game *ICO*, which uses a variety of chains and pillars to frame its headings, screenshots and

backgrounds, bringing to mind the general appearance of the game's labyrinthine tower without specifically referencing its layout. But many manuals opt to include—often alongside the story section—some form of world map to explain how the space of the game is stitched together. The purpose of these maps is hinted at during the two page spread in the manual for the 1996 Super Nintendo game *Super Mario RPG*, wherein the manual's narrator, Luigi, looks at the map and exclaims, in large red letters: "Wow... This World is Huge!" (8-9). As gateway paratext, the manual map serves to impress the player with the complexity and immensity of the game he or she is about to play; as in medias res paratext, it helps the player determine current location and overall progress. Manual elements that focusing on the spatial aspects of the game are not so much instructing players on how to play but on how to orient themselves in a larger gameworld.

The manual maps stand at the far end of the spectrum of manuals resembling gameworld objects. For special editions of games in particular, it is not unusual for the maps to be packaged separately from the manual, and made not out of the usual glossy material but cloth or felt; at this point, the map doubles as orientation device and in-game found object, as a close facsimile of map as it would appear to a character within the game. Instruction manuals proper are often adapted to this end as well, and it is reasonably common for a manual to be depicted as a journal, containing entries written by characters from the game (*Pitfall II* and *Pitfall Harry's Diary, Half-Life: Opposing Force Soldier's Manual*); as a file folder, with dossiers on the game's items and characters (especially in spy-based or thriller-type games, such as *Max Payne, GoldenEye*, or *Mission: Impossible*); or simply as a collection of papers sitting on the top of a table (*Mercenaries: Playground of Destruction, Private Eye, Seaquest*).

The key term in the found-object style manual is compromise—the compromise between presenting an artifact that authentically appears to be from the game it represents and serving the nominal purpose of an instructional manual. Through different configurations of image and text, a variety of strategies are available.

The manual for the 2001 PS2 game Extermination juxtaposes its appearance as an ingame information terminal with a symbolic visual representation. Inside the manual, every page is part of a two page spread depicting two columns of information that appears in white computer font over a blue grid background. Around the blue terminal screen is a metallic gray border. The manual commits fully to its fictional representation of a terminal screen, presenting screenshots in the shape of file folders, and addressing its text to members of the Team Red Light, the recon team sent in to investigate an Antarctic base that sent out a distress signal and then went silent. The dedication to the fiction does create some dissonance in the manual's address; if the reader is a character in the game, why would the character be aware of the title screen, or saving the game? But the reader's attention is drawn not to this contradiction but the manual's visual salience. Every page follows the same format, with two exceptions. On the left frame, there are six hole placed in a vertical line; one hole is always filled with a blue and white arrow, representing the section of the manual—the first section has the top hole filled, the second the second from the top, and so on. Consequently, the manual has a sense of constant progression, visually confirmed. This progression is countered, however, by the appearance of a fleshy growth that starts at the bottom right of the first page, then slowly extends in each corner, moving from the margins towards the center. The found object of the console, then, replicates the primary conflict of the game: the further the player manages to

progress in the abandoned Antarctic base, the further the virus extends as well. The *Extermination* manual stretches the reality of its instructions in order to better depict the primary aesthetic depiction of the game it represents.

The manual for Interplay's 1997 PC game Fallout places more emphasis on its textual content. The entire manual is made out to be a "Vault Dweller's Survival Guide," as the cover proclaims, a set of instructions for coping in a post-nuclear environment. After the table of contents and brief introduction, the manual jumps into its subject, with a five page description of the immediate environmental effects of a detonation. After relating the atmospheric effect and short-term fatalities, the manual goes to considerable detail on the timeline of fallout, before ending on the note that "The reduction in aggregate strategic arsenal yield that occurred when high yield weapons were retired in favor of more numerous lower yield weapons has actually increased the fallout risk" (7). The sole picture in the section depicts Vault Boy, the Fallout series' mascot, avoiding a nuclear detonation by hiding under a desk. He looks toward the reader, and offers a thumbs-up and a wink. The deadpan description of the very real dangers of nuclear attack are entirely undermined by a single image. Such an upset prepares the player-reader for the main actions of the game, and subsequently the series: humorous, even comic play that takes place under the backdrop of a world ruined by the final excess of war. In this case, the manual instructs the player with real world information about nuclear devastation, but situates it in a decidedly ludic frame.

For other games, the manual can offer a glimpse into a fiction much broader than the game itself. This enlargement was, as stated previously, the case for early Atari games whose manual and package covers depicted a fantasy more detailed than the game was capable of

reproducing. In some manuals, this expansion is evident in the description of fantasy lore not present in the game, as was the case in the previously mentioned Diablo II. The extreme example is the booklet that comes with the manual for Origin System's Strike Commander, a 1993 combat flight simulator game with slight management elements in balancing finances between missions. Strike Commander's manual consists of 60 pages of instructions, followed by a booklet that is presented as a Soldier's of Fortune magazine called *Sudden Death*, containing letters from the imagined readers, editorials, advertisements from competing mercenary teams, interviews, and a testimonial from an assassin that reads like a pulp thriller. The plot of the testimonial is worth recounting: A group of mercenaries called the Claws failed in their contract to destroy a rival aerial weapons designer. But they failed because their client deliberately gave them false information so that they would damage their target but be too depleted themselves to collect the reward. The remaining member hires the assassin, Gule Gule, to kill their former client for revenge. He does so, detailing the consequent stalkings and reversals in great detail, before concluding: "I caution those corporations who would cheat the mercenaries who shed blood in their services—take care. The payment may be dearer than you ever dreamed" (33).

As literature, Gule Gule's story is a subpar revenge story. As paratext, it is something much stranger. It expands and elaborates on the story contained in the game, adding characters and locales that touch on the main game, without being directly relevant to it. At the same time, it depicts action wildly out of sync with the actual game. As a flight simulator, *Strike*Commander does not allow players to go on assassination missions or set up wire-tips as Gule Gule did. But as gaming capital, it makes a kind of sense, as it indicates not the kind of action

the player will perform, but how she should play, encouraging her to think of herself as honorable (or at least, honorable within the moral code of *Sudden Death*) fighters like Gule Gule. By drawing on literary conventions such as the revenge drama and the code of honor, the booklet accompanying the *Strike Commander* game re frames the attitude of the player, to encourage an engagement and motivation beyond the immediate flight simulation.

The final movement of the found object instruction manual is when the manual ceases to instruct and exists only to embellish the game's story and setting. Such is the case of the instruction manuals for the Grand Theft Auto series. Since the Vice City title, the manuals are made to appear as travel brochures or advertisements for the cities in the games. From their titles ("Vice City Tourist Guide"; "San Andrea Local Business Advertiser's Guide"; "Liberty City Guidebook") to their back cover, the instruction manuals cease to be about instructing at all; there is a brief section explaining the game's controls, but nothing on how to play the game or even why to play. In this sense, these embody the sentiment of the final era of instruction manuals, when the manual is declared unnecessary to the player's experience. At the same time, the manual still performs various functions. Ad advertisement for Burger Shot in the Grand Theft Auto IV manual urges customers to buy artery-clogging burgers to support the American economy, participating in the satirical humor the series is known for (11). The back of the Vice City manual depicts the game's major characters, providing a list of events to participate for new players and a reminder of the story to current players. Above all, the focus on the manuals reiterate the focus of the series. By centering so relentlessly on the cities themselves, the manuals tell the player that the most important part of the Grand Theft Auto series is not the lauded and decried criminal activities or sordid stories, but the exploration of

the city. Even at the very edge of being classifiable as a manual at all, the manuals/tourguides of *Grand Theft Auto* offer one final example of how the manual as paratext can frame a player's experience.

The history of the videogame manual is the history of the videogame. It begins with fledgling attempts to inform a new home audience with information on alternate modes and settings. And it progresses, as the games move towards greater length and complexity, to telling a story set in a fictional world. With the advent of Nintendo and the Nintendo Entertainment System, the story expanded further, as did the options for controlling the character, reflecting the greater sophistication in terms of input that the hardware could afford. In the early 90s, the manuals incorporated the splitting and expanding of games in terms of genre, and the Sega Genesis' manuals offered the first hint that a lesser manual implies a more approachable game. At the same time, the manuals for portable systems and computer games illustrated how manuals adapted to compensate for differing technology, whether it was reduced image capability, or a platform more suited to textual complexity. As games went online, the manuals expanded to take in this new facet, but at the same time, contracted to show less of the gameworld as the game itself became more proficient in telling its own story. Finally, in the industry's current state, both instruction and story can now be contained within the game, as technological capability meets demand. Its instructional necessity supplanted, the manual disappears.

But that is just one history. Under a variantological lenses, the instruction manual fulfilled many different functions in many different ways, operating as a paratext that enhanced the game's meaning for an audience. Most of these methods required complex integrations of

image and text. Tactics as diverse as those in *Metal Gear Solid 4* and Atari's short-lived *Atari Force* attempted to use comic books to fuse its cultural associations with games, and to solidify notions of gameplay and story. Other manuals not only accepted the truism that games were for children, but reveled in it, whether it was through the child education of *Oscar's Trash Race* or the playful call for chaos in *We Love Katamari*. Companies like the fledgling Activision tried to use game manuals to create an ethics, a notion of game capital that encompassed not just what it meant to be a player, but what it meant to make a game, and how designer and player should relate to each other. Finally, while most manuals attempted to echo the visual aesthetics of their game, some went much further, attempting to turn their own instructions into an object within the game. World maps and backgrounds conveyed a sense of the game space, and travel journals and tourist pamphlets created a vision of what it meant to explore a gameworld. The *Fallout* manual tried to convey a sense of style to prepare players for what it meant to be playful in the ashes of a civilization. These manuals are not just outdated media, but assemblages of image and text that participate in what it means to play a game.

2. From Separation to Fusion: Text in Early Videogames

Introduction

Ultimately, studying the paratext of a work is not a substitute for studying the work itself. The instruction manual paratexts for videogames are a valuable source of information. They can reflect trends in technology and game design. They can frame how the game is to be interpreted. In some cases, they can even set up their respective videogames in the larger context of image-text history, via the incorporation of comic-book style art or picture books. But at some point, attention must shift from the paratext to the games themselves. Like the instruction manuals, videogames follow a historical trajectory in which technology is constantly advancing, and in order to sell the new and improved products, game publishers incorporate that technology and emphasize what new capabilities it allows. The result is a cultural climate where the latest graphics are championed, and text is often no more than the assumed support for those graphics, if available at all. For this chapter, a study of image and text in the videogames of the 1980s, the image and text comparison begins as a literal split, with technological affordances commonly allowing investment in one at the expense of the other. But the focus on image over text has not always been the case for videogames, and the conflict between them has its own history in Western culture.

Historically, as W. J. T. Mitchell details, the conflict between image and text is a flashpoint for larger discourses concerning conflicting ideologies. As Johanna Drucker's work attests, this traditional split can sometimes lay the groundwork for new permutations of text and image combinations, as was the case for the early twentieth-century modernist typographers. By pursuing their particular brand of typography, the artists devoted to this form

felt that they were participating in and precipitating a larger revolution. In contrast, early game designers were also developing a new form that combined image and text, but bound themselves more closely to technology and economy. Nevertheless, a sense of revolution permeates early videogames, as in Nolan Bushnell's business model for the foundling Atari company.

The 1980s were a period of creative flourishing for the game industry, albeit a flourishing that was bound to advancing technology and initially halted by the 1983 videogame economic downturn. Designers and players alike sensed they were in the midst of something revolutionary, a fledgling new medium with the potential to grow and change. Bound by technological, cultural, and economic constraints, console games and computer games pursued very different paths of development, one image-based and one text-based. Some, such as Warren Robinett, thought the two roughly equal, if separate, a vision he pursued in the development of the Atari Adventure. Others saw them as fundamentally different, and constructed new directions rooted in old mediums. Nintendo expanded on the model provided by the arcade and the television, and developed the image-based patterns of Super Mario Bros., creating a whole new genre with its own conventions and rules. Infocom, with a series of textbased games, drew on the medium of literature (particularly fantasy and science fiction) and the affordances of the early personal computer, and created interactive fictions capable of confronting issues of wordplay, satire, and political ideology. Both Infocom and Nintendo reached a degree of commercial and creative success with these paths, but both also reaffirmed the fundamental division between image and text.

In that regard, Cinemaware's 1989 Amiga game, It Came From the Desert, offers a

glimpse into the future of gaming, as it incorporated both image and text into its design—somewhat ironic, then, that it did so from the "dead end" platform of the Commodore Amiga. It did not use any radical construction of image or text to do so; in the West the written word has long been associated with logical mastery, and the image with potentially monstrous chaos, and in that regard, *It Came From the Desert* draws on well-worn tropes. What the game does do differently, however, is that it structures this conflict between word and image within the context of a simulated space, the entire town of Lizard Breath, and it does so through the image of the map, the text of the people, and the relentless—and occasionally, terrifying—procession of time. *It Came From the Desert* did not single-handedly cause a change in game design, but in its focus on the simulation of space, it serves as bellwether for the shift between text-heavy and image-heavy videogames existing side-by-side to an industry more dominated by the pursuit of graphical realism.

In Stephen Kline, Greig de Peuter, and Nick Dyer-Witheford's book, *Digital Play*, they develop an approach to game studies that emphasizes culture, industry, and technology. Drawing on Raymond Williams, the authors argue for a "three-circuits model" approach to videogames, in order to situate them in the larger field of media studies: "In the technology circuit, we are referring to the practices of inventors, machines, and users; in the cultural circuit, to the production and circulation of meaning in video games as media 'texts'; in the marketing circuit, to the communication practices that link marketers, commodities, and consumers in the gaming marketplace" (23). The discussion last chapter of the end of the instruction manual is a good example of the three circuits at work. Technologically, the manual was obsolete as its main functions could now be integrated into the game itself. Culturally,

players were disdainful of the manual, preferring the model of actively participating in learning the game rather than more passively reading (or so they saw it). Combining technology and culture, players also preferred to consult player-authored walkthroughs, and, later, wikis, which could be longer and easier to search. And on the third circuit, in terms of economy and marketing, the manual had become a burdensome production for the publishers; letting players rely on online sources was cheaper and required less labour, from their standpoint. These factors, market, culture, and technology combined, contributed to the physical manual's demise.

As the authors state, their approach was developed in part to combat the idea that videogames constitute separate, virtual worlds, that players who engage in them become immersed in something that detaches them from larger networks and couplings—a counter in part to the notion of "the magic circle," a concept that is still debated in current game studies. The unfortunate side-effect is that their three-circuits model works well for investigating individual companies or ongoing game trends concerning violence or gender, but works poorly for investigating individual videogames; in fact, a major drawback of *Digital Play* is its failure to fit study of individual games into its larger discussion. Dyer-Witheford and Greig de Peuter somewhat amend this oversight in their later book, *Games of Empire*, which modifies the three-circuits model to incorporate elements of Hardt and Negri's *Empire*, and includes in-depth studies of *Full Spectrum Warrior, World of Warcraft*, and *Grand Theft Auto*.

For my part, as previously, I think the best way to discuss individual games, and image and text, in the context of the 1980s videogames' culture, technology, and industry is to take a variantological approach, and examine how individual games act as variants supporting or

pushing against the dominant forms. What remains, before turning to individual games, is to establish the cultural and technological contexts of both image-text configurations and the cultural and economic state of the early videogame market.

Image and Text in Historic Context

The videogame medium(s) is only one site among many in the debate surrounding image and text in Western history. In *Iconology: Image, Text, Ideology*, W. J. T. Mitchell explores the "*idea* of imagery," how various theorists including Nelson Goodman, Ernst Gombrich, G. E. Lessing, Edmund Burke, and Karl Marx used the concept of the image in contrast to the concept of text to advance and analyze certain rhetorical arguments (1). Later, Mitchell describes what is at stake in the image/word split in more detail:

We imagine the gulf between words and images to be as wide as the one between words and things, between (in the largest sense) culture and nature. The image is the sign that pretends not to be a sign, masquerading as (or, for the believer, actually achieving) natural immediacy and presence. The word is its 'other,' the artificial arbitrary production of human will that disrupts natural presence by introducing unnatural elements into the world—time, consciousness, history, and the alienating intervention of symbolic mediation. (43)

Western culture, at various points in history, projects onto the difference between words and images the difference of signification, of culture and nature, of immediacy and mediation. But in contrast to Mitchell's formulation that word is the representation of culture, in videogames, the image comes to be the representation of technology. This is the gap that appears again and again in videogame history, especially under the popular notion that more sophisticated, photorealist graphics leads to superior immersion, as will be described in subsequent chapters. It is even evident in the instruction manuals of the previous chapters, both in the explicit form of manuals such as *Donkey Kong Country* that promise "realistic" graphics, and more

generally, as screenshots and pictures commonly prop up dry text, connecting the instruction at hand to actual play.

The image/text split is not, and has never been absolute, starting with the very obvious observation that text is, by its visual-based nature, a type of image, albeit usually an abstract one. Visual theorist Johanna Drucker makes that exact point, in a number of different ways. In The Alphabetic Labyrinth, she studies the history of the Western alphabet, not in terms of its logocentric use, but as "a symbolic matrix whose letters are assumed to encode in their visual shape the history of the origins, of some fundamental cosmological or philosophical truth, or some mystical or ritual power" (12). In particular, in the chapter on Renaissance practices, she juxtaposes the use of the alphabet in cryptography with attempts to create a universal language (171-188). Through such historic efforts, the applications of the alphabet as text runs the full gamut from obfuscation to enlightenment, from a proliferation of symbols that obscure meaning to the restoration of some ideal state of perfect communication. In various points of human history, the image has been portrayed as everything from a dangerous lie, under Plato, to direct access of the real, as with Barthes and the photograph. Drucker demonstrates that, as much as the image, text can also be viewed in terms of deception as well as a "natural" immediacy of meaning.

More relevant to text and image combinations of the twentieth century is Drucker's other book, *The Visible Word: Experimental Typography and Modern Art, 1909-1923*. In it, Drucker represents typography of the avant-garde as a hybrid form: "In this burgeoning of cross-disciplinary, sometimes synesthetic, activity typography participated in the characteristics attributed to both the *imago* and *logos* as representational models" (49). The

typographic art of such diverse figures as Apollinaire, Zdanevich, and Marinetti varied greatly, but shared a common method of creating art that destabilized the default conception of typographic text as pure content.

Famously, typographer Beatrice Warde argued that the ideal font is that which functions as a "clear wine glass," that its purpose above all else is "to convey specific and coherent ideas," to put "readability" above all else ("The Crystal Goblet"). Through these typographic artists, Drucker argues that text as art is for more than transmission, that the typographic works accomplished a number of artistic objectives: "the blurring of lines between high and low (socalled) cultural practices, the challenge to the romantic subject, the assertion that the transformation of symbolic systems was a politically significant act, and the proposition that a new aesthetic form would bring about, construct, envision, a new utopian vision of the world" (11). This utopia, obviously, did not come to pass, and Drucker describes, in the final chapter of her book, how the most lasting artistic influence of the typographic art was in the area of advertisement, that the main consequence of the movement was how it was co-opted for financial purposes. But the typographic art movement at large demonstrates how technology, in this case in the form of the newly improved mass-production printing press that allowed easier distribution of complex word-image configurations, can be adapted to effect artistic, and, later, commercial, demands.

Videogames: Potential for Play

I would argue that the early 20th century typographers form a useful contrast to the videogame designers of the 1980s. Like the typographers, the designers were a diverse group that, through various forms, were also taking advantage of new technology to pursue a new artistic medium, redefining what could be done with video, television, and computers, in a new mix of high and low culture. And while they did not specifically seek out a new utopian vision, the early designers did play with creating a new workplace paradigm, one that redefine work in the context of play. And arguably, such a transformation was needed. Among other accounts, the anthropological studies of Victor Turner suggest why a new type of play in work is necessary. In From Ritual to Theatre: The Human Seriousness of Play, Turner argues that, prior to industrialization, Western society could still resort to liminal spaces, rituals outside of the common practice of life. These spaces allowed people to "play with elements of the familiar and defamilarize them. Novelty emerges from unprecedented combination of familiar elements" (26). The liminal existed to allow people a safe place to experiment with their lives without fear of unintended repercussion; Turner offers adulthood rites as typical examples (25). After industrialization, these spaces cease to exist, as play became reframed in the context of leisure, rendering it a childish indulgence; banishing play to leisure, he argues, mutes its social significance. Turner maintains that interactive theatre is the solution to restoring the liminal over the liminoid, but the developers of the 1980s pursued a different path: videogames.

The mix of play and work in the early game designers is best seen through a few object texts, written documents by various company heads that defined the new technology as a technology of play. First and foremost among these documents is Alan Bushnell's "Atari

Manifesto." Co-founder of Atari in 1972, Bushnell was no stranger to the entertainment industry; prior to his work in videogames, he was employed as a carnival barker, and after, he founded the family-oriented franchise Chuck E. Cheese. While with Atari, he oversaw the development of its arcade games and the expansion into console gaming with the Atari Video Console System, later renamed the Atari 2600. During the company's initial period, Bushnell wrote and distributed the "Atari Manifesto," a guideline for how he felt the company should operate. The vision that emerges is a company that is "politically active," "encourage[s] and promote[s] personal growth," and remains "in harmony" with its people (Bushnell). In particular, under the starting section, "FAIRNESS," Bushnell sums up his hope for Atari's work ethic: "Fairness is the best single word which means play the game by the rules. We play hard, play to win, but we will play by the rules of local, state, federal, and international law, as well as the standards of ethical business practice and fair labour relations. An unethical corporation has no right to existence in any social framework. Besides, winning by cheating is, at best, a hollow victory." The basic rhetorical strategy here is plain: Bushnell is applying the ethics of gameplay to the ethics of work, equating the rules of the game to the laws of the land, and a successful, profitable company to a winning game. Atari, by this measure, is a business on the principle that everyone involved should have a fair chance at success. In theory at least. 15 Bushnell felt that business could and should profit from the lesson set by games, by embracing a rule structure, and, following Turner, transforming work into play, instead of the

While winning by cheating may be "a hollow victory," that doesn't mean Bushnell wasn't above seizing that hollow victory when opportunity permitted. To get around contracts on exclusive arcade distribution, Atari created the fake competitor "Kee Games," to distribute games that played identically to Atari's existing games, but looked slightly different. Since Kee Games was headed by Bushnell's neighbor Joe Keenan, it certainly suggests he was aware of the deception. Though it goes directly against the Atari Manifesto, such a deception still has an element of "playfulness" about it.

other way around.

Atari's employee-friendly business model, unfortunately, failed to outlast Bushnell's departure in 1978, shortly after the company was purchased by Warner Communication. In part in response to increasing corporate concerns at Atari, four disgruntled programmers—Larry Kaplan, Bob Whitehead, Alan Miller, and David Crane—left to form Activision (Fleming). As illustrated at length in the previous chapter, Activision manuals of the late 70s and early 80s were rife with passages equating gameplay and game capital, simply by drawing on the designers' expertise to offer tips to the players. A 1982 commercial aimed at corporate investors reinforces the point, juxtaposing the commercials used to the sell the videogames with quick interjections from the designers themselves. In the commercial, the designers emphasize a three-part connection: they contribute creativity and "state of the art" programming to create games that are "more to true to life" and graphically advanced, and draw the player "into the game" by calling on increasing levels of physical skill and strategy (thecowboy2). As paratext, the commercial is a little unusual, as it is not aimed at changing the reception of a particular game, nor is its audience anyone expected to actually play Activision games. Rather, it transforms the games themselves into paratexts, through reference to the original commercials and the designer interviews, paratexts influencing the reception of the Activision brand among potential investors. Further, the commercial repeats several times Activision's chief slogan of the period: "We put you in the game." This statement, implying that superior graphics in particular allow players to feel as if they are physically present in a virtual world, is one that will particularly come into its own in the 1990s, with the advent of 3D gaming. Activision's adoption of it in this point of time demonstrates that it has long been a

hyperbolic claim and eventual goal of the gaming industry, even at a time when the average game cartridge had a standard 4 KB of ROM.

For immediate purposes, however, what is particularly significant about the commercial is the way it conflates play and work. Activision's president, Stephen Levy, offers a typical example: "We've come out of nowhere to be a leader of the industry in just two years. But we've just started. The fun has just begun, because there's enormous creative growth, there's enormous industry growth in front of us." Admittedly, there is nothing in this statement particularly unique to Activision; it is a quotation that could have been uttered by almost any up and coming game developer at nearly any point in the commercial game industry's history. It is, however, a statement perfect for the videogame industry, as it equates creative growth with industrial growth, and economic success with fun. If Bushnell's "Atari Manifesto" presents a bold dream for industry, through the integration of the spirit of games and play, then Activision's corporate commercial presents a rude awakening, adopting the terminology and creative sense of play, but leaving the actual play behind. In five short years, the model flipped from turning work into play to blending the two so that play was indistinguishable from work. Despite Bushnell's best efforts, and even Activision's own efforts to put the designers first, the liminoid steadfastly refused to turn liminal.

Based on the two cases above, it may seem that videogames, as an artform and an industry, immediately moved far away from any legitimate comparison with the modernist typography movement. But such a conclusion requires a number of caveats. First, it is hardly fair to say that after Bushnell's failed manifesto, game developers never again flirted with more egalitarian, playful, or creative business models; such attempts occur regularly to this day, and

were common in the 1980s as well, as the later case of the Atari Amiga will demonstrate.

Second, the ultimate fate of the typographic art movement was very similar, following the general commercialization of modern art at large: as Drucker puts it, "There is perhaps no more perverse (and successful) transformation of the formal radicality of early modernism into the seamless instrument of corporate capitalist enterprise than this progression from radical graphic aesthetics into Swiss-style modern design" (*Visible Word* 238). In this regard, the difference between the two movements is less that the videogame was commercialized while the modernist typography remained independent and more that both were commercialized, the videogame just at a much faster rate.

Adventure and the transition from text game to console graphics

The early stages of the videogame industry are marked by a confusion of work and play, a confusion of the cultural notions around games intermingling with the economics of business, with technology spurring on development. Robinett's Atari 2600 game *Adventure* demonstrates how conceptions of image and text become caught up in the three-circuit model, as it is a game made at the behest of the graphic-based, corporate-managed company Atari, but inspired by the pure play of its predecessor of the same name, the text-based mainframe *Adventure*. The transition from one *Adventure* to another encapsulates assumptions arising out of available technology, the culture of games, and the relation of image to text.

Raymond Williams once observed that that the adoption and uses of technology—he offered the television as an example—are shaped by social forces, that, far from the technological determinism view, what technology is developed depends on the society from which it arises (295). In the case of the earliest text-based videogames, that social force was the university computer laboratory. Up to the 70s, most computers in North America were mainframe computers, owned by universities or governments and shared among multiple departments. Time and memory space on these computers were tightly monitored, leading to a culture where game players (often male university students) could play only during off-hours, and had to hide their games under fake names. Particularly relevant to an image-text discussion, these computers were designed primarily to accept text input from a keyboard, process data, and display more text; with some exceptions such as *Spacewar!*, most games designed had to follow suit, using either symbolic ASCII-graphics, such as in the dungeon game ROGUE, or being entirely text-based themselves. The earliest canonical example of the

latter text-based games is *Adventure*, made by Will Crowther for his daughters in 1975 (Montfort 86). ¹⁶ The original *Adventure* was a simulation, of sorts, of the existing area known as the Bedquilt Cave, although there were also dwarves, treasures, and a pirate in the game that did not exist in its real world equivalent. The game was distributed through various universities via ARPANET, and eventually was discovered by Don Woods at SAIL (the Stanford Artificial Intelligence Laboratory). With Crowther's permission, he expanded the game, elaborating on the magical, fantasy elements and clearing up some of its bugs.

In *Twisty Little Passages: An Approach to Interactive Fiction*, Nick Montfort refers to *Adventure*, and the games of its type, as interactive fiction, ¹⁷ which he defines as "computer programs that display text, accept textual responses, and then display additional text in reaction to what has been typed" (vii). Further, he argues, in order to qualify as interactive fiction rather than some other form of interaction, it must simulate an entire world, and apply a parser to process the user's input (viii). Both of these qualifications have been contested by various other scholars and interactive fiction authors; Emily Short's *Galatea*, for example, is at least as much a conversation system as it is a simulated world, and Short has frequently labelled text-based games with a menu-based selection of choices (often called CYOA, or Choose Your Own Adventure, after the 1980s book series) as interactive fiction ("So Do We Need This Parser Thing Anyway?"). While Montfort's terminology will arise again when the discussion turns to Infocom's games, what is relevant for the moment is that *Adventure*, especially in its more widely distributed post-Don Woods version, fits all of Montfort's definitions: it uses a parser, it

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As Montfort explains in some detail, there is some disagreement about the exact date among scholars, but 1975 seems likely, as *Dungeons & Dragons* was not published until 1974, and Don Woods released his version of *Adventure* in 1976 (91).

Montfort does distinguish between "text adventure" and "interactive fiction," qualifying that the former is a subset of the latter, but for the purposes of this chapter and period, the two are roughly interchangeable (6).

represents a fictional world, and it displays text in reaction to the user's textual responses. It was designed for a text-based interface because that was what was available to university computer users at the time, and it became widespread because that text-based interface was easily transferable to the heterogeneous variety of computers available at the time.

At the same time as the text-based computer game cabinet was developing, the arcade game was also developing, as detailed previously; in time, the console game system entered the picture as well, to offer an "arcade experience" at home. Arcade games had a heavy influence on early console game design. There was a direct influence, in that many early console games were ports of arcade games, simplified to fit in a console cartridge. But there were also common game elements passed from arcade to console, some of which did not work in a home console setting. Given that few early console games had built-in memory writing capabilities, ranked high scores were not really useful, as they reset every time the system was turned off but many of these early console games had them anyway, largely because they were familiar to users and designers from the arcade model. Likewise, attract screens, default animations that play when the game is left without input at the title screen, were originally made to attract potential users in an arcade situation, have long been videogame mainstays, even though their original purpose has long since passed. As one theorist notes, arcade games were designed to be brief and punishing in order to exact the maximum amount of money from their users, a tendency that dominated console game design for a long time in videogames that relied on lives rather than health of the PC (Galloway 33). This exchange between arcade and console went both ways, but for a long period, the stamp of the arcade was a clear part of the home console mold.

Another major technological and social influence on the console systems was the television itself. In How Television Invented New Media, Sheila C. Murphy argues in favour of the television's influence: "As a key consumer technology, set into domestic and public environments, television establishes our expectations about media and technology, and it is through television that many people have learned how to be media users and individuals" (80). Given that consoles worked by plugging into the existing TV display—and still largely work that way today—console game manufacturers were obviously targeting television users over computer users, a wise move given that the television had a much broader user base, especially at the start of the 1980s. Some manufacturers attempted to position their systems between the computer and television, going so far as to suggest that the console could make the television into an ersatz computer, as Murphy describes elsewhere ("This Is Intelligent Television"). Moreover, the social associations of the television allowed the console systems to position themselves as safer and more comforting in relation to the arcade: "It's a good bet that some of the places you had to go to play a game of pinball weren't the most comfortable for you. Well, relax. Since you were wise enough to invest in this ATARI VIDEO PINBALL Game Program, you'll never have to worry about being at places with that kind of unsavoury atmosphere again," boasts the manual for the 1981 Atari game Video Pinball (2). The game is also a good reminder that the console games were not just re-situating arcade videogames, but all arcade games, claiming that the same experience could be offered from the technology found in every family's living room.

Both technological sources, television and arcade, had been optimized to provide images over text. But the home computer games were a source of inspiration for console games

as well, particularly in the case at hand. In choosing to adapt *Adventure* for the Atari 2600, programmer Warren Robinett was faced with the problem of how to convert a wholly textbased game into a predominantly image-based system. He started with a direct translation of the game's elements, designing the graphic Adventure to also contain a magic rod that summoned a bridge, and converting the original's "twisty little passages, all alike" maze into an eight-screen maze in the Atari game. ¹⁸ Overall, though, he found this method unsatisfying: "While the general idea of a video game with rooms and objects seemed to be a good one, the graphic language of the video game and the verbal language of the text dialogue turned out to have significantly different strengths. Just as the differences between filmed and live performances caused the art form of cinema to slowly diverge from its parent, drama, differences between the medium of animated graphics and the medium of text have caused the animated adventure game to diverge from the text adventure game" (696-7). Robinett's metaphor is slightly strained; while the text-based adventure game was arguably the predecessor for the graphic adventure game, graphic-based games in general actually predate text-based games, thanks to the original *SpaceWar!* in the 1960s. Moreover, the comparison only works if one is willing to equate the five to ten year lifespan of the commercial text-based adventure game to the thousands of years of drama that preceded film. What the quotation does, however, is clearly demonstrate two things: first, that there was a clear demarcation between text-based and graphic-based games in the minds of developers at the time. And second, the difference is framed in terms of technology and evolution: videogames started as text, then diverged and became graphic-based as time passed and technology advanced.

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Possibly the best known phrase from text-based adventure games that doesn't involve being eaten by a grue, it was also the source of the title for Montfort's aforementioned book on interactive fiction.

Though the reality is somewhat different, Robinett constructs a commonly accepted history of videogame development to position his own game within it.

Robinett explains the other equivalences between text and image in detail. Movement via keyboard input was replaced with movement via the joystick, and managing items (which he deems as the most important part of an adventure game, next to movement) was accomplished by touching the object, and dropping it with the Atari pad's one button. Which item the player held determined the action the player performed, taking the place of typed commands such as "unlock door" or "kill dragon": "Thus the syntax of nouns and verbs in the text adventure had an analogue in a video adventure—a 'syntax' of overlapping shapes" (698). Text telling the players they cannot travel in a certain direction is replaced by a visible wall (703). The mazes, Robinett admits, were easier in the Atari game, because they were concrete and visible, whereas the text adventure's versions were abstract; the difficulty is increased through methods that violate easy progress on a 2D plane, including obscuring views, looping passages between rooms, and designing passages that only allow one-way travel (705-711).

Significantly, he chooses to refer the player's avatar in the game, a tiny block, as the cursor, likening it to the blinking line indicating where the player's text would be entered in the original version (704). Like the drama and film metaphor, the comparison is not perfect; the cursor in a text-based game is what indicates to the player that he or she may act, but it is not equivalent to the player acting, not in the way the way the Atari block is. Rather, a more appropriate equivalent would be an abstract player-character, whose actions include the ability to respond to the cursor. Robinett uses the cursor because his focus is in the other direction, ways to create direct equivalences that originate in the text-based game and gravitate toward

visual expression. This relation is appropriate, given his focus on adapting *Adventure* to the Atari, but it also reflects his argument that one form precedes the other. Robinett's *Adventure* attempts to bridge the gap between computer and console gaming by adapting a text-dominant game into a graphic-dominant game. But even while Robinett maintains that the two approaches are equivalent, the specifics of his argument suggest the upcoming shift towards the graphic dominant narrative of videogame technological progress.

Super Mario Bros. and graphic-based advancement

While Robinett was speaking rather specifically about the relationship between his Adventure and Crowther and Woods' version, his generalized phrasing gives the impression not only that text adventure games are more antiquated than graphic adventure games, but also that the graphic-based games start with a "syntax" rooted in finding visual equivalents for text. Nintendo's Super Mario Bros. series for the Nintendo Entertainment System demonstrates that the console games can and did move beyond these roots, through the games' utilization of image-based design to guide the player. The first Super Mario Bros. game for the system was released in 1985, six years after Robinett's Adventure. It was not the first appearance of the main character Mario, who had already appeared in the earlier *Donkey Kong* series and *Mario Bros.* But it was his first appearance after the 1983 videogame crash that created Nintendo's new hold on the North American market. Nintendo was aware of how precariously a new game system would sit in this market, and took steps accordingly, promoting the console as an "entertainment system" rather than a game system, and emphasizing its nature as a toy (Donovan Replay). As its flagship title, a large portion of the system's success hinged on Shigeru Miyamoto's Super Mario Bros.

From his inception in the 1980 arcade game *Donkey Kong*, Mario was bound by the technology that produced him. In an interview decades later, Miyamoto explains the logic behind Mario's appearance and abilities. Originally, he explains, he designed Mario without the ability to jump, figuring that the game would be entirely controllable by the joystick. But since the arcade cabinet he was designing on came with a button in addition to the joystick, he had to give it some function, and decided that jumping was the most logical action. As for his

appearance, everything was determined by Mario's composition as a 16 x 16 pixelated image. Mario has a moustache because it was easier to animate than a mouth; he wears a hat because it is easier to animate than hair. To show that Mario is running, Miyamoto has him raise his hands in the air. Consequently, he wears overalls of a different colour so the player can easily distinguish his hands from his body, and white gloves so the player can tell where he lands. The interviewer, Nintendo President Satoru Iwata, notes that "There's a sense of inevitability about all of this," that "The entire design was a case of form being dictated by function" ("Iwata Asks New Super Mario Bros. Wii" 19). Mario was, perhaps, not the only distinctive character who could have been designed from the 16 x 16 pixels available to Miyamoto and his design team. But he is a character derived very explicitly from those technological limitations, each feature arising directly out of a consequent tenant of design.

As for *Super Mario Bros*. itself, the game is tightly bound to its visuals, consciously constructing a visual lexicon to teach the player how to respond to it. While the game is not entirely devoid of text, the text has been pushed to the margins, as is typical for games of this time, appearing in the title screen, the pause menu, between stages, and at the far top of the screen, labelling score, player (Mario or Luigi), world section, number of coins, and time remaining. Though the instruction manual does take on the role of verbally describing the workings of the game, the actual game moves beyond text instruction and does most of the work in teaching the player how to progress, particularly through the layout of the first world. Turning again to Miyamoto, he explains that the first encounter in the game was very carefully

The Iwata Asks interview series, incidentally, is an interesting case study in paratext. Ostensibly, the interview series, wherein the President of Nintendo interviews top-tier Nintendo designers on classic and current games, is meant to provide readers with an insider's look at Nintendo's history. As an indirect consequence, the interviews constitute an attempt by Nintendo to solidify its reputation as a company devoted to tradition and innovation.

choreographed: as the player moves to the right for the first time, she encounters a goomba, a row of floating blocks ending in a question mark block, and a pipe at the far right. The question mark contains a mushroom, but Miyamoto worried it resembled too closely the enemy goomba. So, to encourage the player to touch the mushroom, it collides with the pipe and reverses direction to reach the player—the environment is designed specifically to teach the player about the function of mushrooms through visual reinforcement rather than having to read the manual.

Miyamoto is not the only one to speak on the visual design of the game. In the second volume of the same interview series, Iwata interviews Takashi Tezuka and Toshihiko Nakago. Again, Iwata frames the design at the time in terms of constraint by technology: "At that time the hardware imposed severe limitations, so if you didn't have a clearly defined image of what you wanted, it would often end in failure." Tezuka and Nakago agree, and describe how the game design began with Worlds 3 and 5, with the aforementioned 1-1 being designed much later, after they realized the player needed a more gradual introduction. Further, they admit that when they originally included the sky portions of the game, they had a problem on how to convince the player to return to the "regular" area by jumping down, an action that normally kills the player in the game proper. They resolved the matter by placing an arrow composed of coins pointing downward—and thus found another visual-based solution to a design problem.

Nor are the game's core designers the only ones to notice the visual-based design.

Jeremy Penner comments that contrary to Miyamoto's statement that games should show the player how to do the impossible, *Super Mario Bros*. is about showing what is possible (4);

Alice Kijiro studies World 6-3, a level with a limited grey-scale palette for backgrounds that

Anthropy notes how a repeated series of blocks in the first level prepare the player for more complicated jumps to come, to take just a few examples ("level design lesson"). In each case, the people involved are noting, first and foremost, how the design of *Super Mario Bros.*, by all measures one of the most important games in videogame history, orients the players to respond to the challenges depicted before them, to learn and master a new visual-based literacy.

In terms of that learned literacy, it is worth taking a brief moment to consider *Super Mario Bros.* 2, released in Japan in 1986.²⁰ Under the alias Ancil Anthropy, Anna Anthropy frames the game's design in an issue of the fanzine *Gamer's Quarter* by describing its immediate visual difference to its predecessor: "One first notices the clouds: they're been given eyes and little, knowing smirks. One may notice that the familiar hills and bushes are gone, replaced by mushrooms and trees. ...Perhaps the most obvious edit is that the ground tiles have been changed from cracked bricks to a more anarchic pebble texture. This is our first hint that Mario is standing on a new world" (10). The visual differences are minor, but notable for players from the first game. The first real difference comes moments later: in a distorted echo of the initial encounter in the first game, the first mushroom that Mario finds, sporting a slightly different colour from the usual mushroom, doesn't grow him to a new size, but kills him. The entire game requires the player to use techniques that could be utilized in the first game, but were not necessary, such as using a "double bump" to propel mushrooms in the right

This game is distinct from the *Super Mario Bros.* 2 that was released in North America in 1988. *Super Mario Bros.* 2 was deemed too difficult for an American audience, but there was still great pressure to release a new Mario game. Instead, Nintendo released another platform game, *Doki Doki Panic*, and reskinned the PCs to resemble Mario characters. Notably, since it was largely the visuals that changed to make the game into a "Mario" game, it suggests that, at the time at least, the Mario brand was based largely on Mario's image (though the game did also incorporate his signature jumping ability). Or to put it a different way, the game was altered to corporate the paratext that had sprung up around Mario.

direction toward the player, and the "running slide" (running, then holding the down button while you still have momentum, in order to slide under a low-hanging set of blocks). Warp pipes can now lead back levels instead of forward, and enemies are uprooted from their usual levels, with aquatic foes now appearing in the air and turtles under water. Anthropy calls the game a "wild deconstruction" of the original's gameworld (11), and that description is apt. Having established a set of visual cues and basic rules in *Super Mario Bros.*, the designers of *Super Mario Bros.* 2 use those same cues to disrupt the player's equilibrium. If *Super Mario Bros.* is the creation of a visual literacy, *Super Mario Bros.* 2 is the advancement of that literacy into a series of practical jokes.

The last major Mario game for the NES, *Super Mario Bros. 3*, is not about deconstructing the visual lessons of *Super Mario Bros.* but building on them. Radek Koncewicz, creative lead of the studio Incubator Games, notes that the first level, World 1-1, begins with a goomba passing under a set of question mark blocks, prompting the player to jump over it in such a way that will demonstrate that hitting blocks produce rewards. Indeed, this scenario is almost the exact duplicate of the beginning of the original *Super Mario Bros.*, including the mushroom that is set to collide with a pipe so that it comes back toward the player; the difference is that, this time, the pipe contains a fire-breathing venus fly trap shooting fireballs the player must avoid. Koncewicz lists the further new lessons the game teaches in the level: using shells to hit blocks that can't be passed under, using the raccoon attack, and learning to fly, among others. *Super Mario Bros. 3* takes the original game's template as assumed knowledge, and builds on it.

In terms of the way the game visualizes space, an even greater addition is that the levels

in a world are now connected via a world map. The maps serve several purposes: they give the player a sense of progress that can be visually affirmed between levels; they provide occasional choice on the player's part in choosing paths; they demonstrate the power of the world's subboss when its airship can travel to anywhere on the map; and they reinforce a sense of unity between connected levels. If, as was mentioned last chapter, the early 80s saw in the Atari 2600 manuals a shift toward game story then *Super Mario Bros. 3* is another step in that process, the coalescence of levels into a cohesive gameworld. Viewed under those terms, the picture-based maps of *Super Mario Bros. 3* are a direct forerunner of the picture-worlds of *Super Mario 64*, where a single large area held multiple objectives for the player to uncover, and, more generally, *Super Mario Bros. 3* is a predecessor for the open world videogame.

The entirety of future videogame design, or even console game design, cannot, of course, be attributed solely to *Super Mario Bros. 1* and *3*. They are two games in a game library that contains hundreds, if not thousands, of alternate models and variations. But they do demonstrate how the social and technological constraints of the home console NES led to an image-based form of communication, where the design of levels guided players to respond and learn certain strategies for navigating these levels. In turn, this basic knowledge could be put to other uses, either by layering on new variations, as in *Super Mario Bros. 3*, or by deconstructing that knowledge, as in the Japanese *Super Mario Bros. 2*. And all this learning was done in an environment where text, if was present at all, was pushed to the side, a way of keeping track of the minutiae. By the time *Super Mario Bros. 3* was released in North America in 1990, the newness of videogames was starting to fade. In its own way, however, it was revolutionary, in how it represented a generation of players who were being taught to think and

progress in an image-based manner.

Infocom and the Literary Aspirations of Text-based Games

While Nintendo was spreading its influence in the home console market, another direction in videogames was unfolding on the PC. Infocom, the largest game developer studio associated with interactive fiction, was founded on June 22nd, 1979, and published a series of text-based adventure games from 1980 to 1989.²¹ The three circuit-model of culture, industry, and technology shaped the form and content of these games. In terms of culture, as mentioned, Atari's founder Bushnell shaped its games based in part on his experience as a carnival barker. Infocom's respective founders included members of MIT's Project MAC (Multi Access Computing/Machine Aided Cognition), and three of them—Marc Blank, Tim Anderson, and Dave Lebling—had been creators of Zork, a popular mainframe text adventure based on the original Adventure mold. Thus, while Bushnell's roots lay in appealing to the general public, and Nintendo specialized in directing wares toward young boys, Infocom's experience began with the university, and it was directed from the beginning, at a more niche, older, audience. The technology and economy behind the games were closely intertwined, as they all relied on a fairly simple virtual machine called the Z-machine, which was basic enough technologically that it could be implemented on almost all of the popular PCs at the time, without wasting time converting from one machine to another. As Nick Montfort reports, this adaptability helped greatly with the viability of their games: "no single computer platform ever accounted for more than 25 percent of Infocom's revenue in any quarter" (127).

For the purposes at hand, what is particularly relevant about Infocom is how its text-

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Some of the latter games, such as the 1989 *Journey: The Quest Begins* and *Arthur: The Quest for Excalibur*, had graphical elements as well, though they still possessed the text-based parser system for input.

based focus led to elements that were beyond the scope of its graphic-based console relatives. A study of three games—Nord and Bert Couldn't Make Head Or Tail Of It, Bureaucracy, and A Mind Forever Voyaging—suffices to demonstrate these elements, in terms of word play, game experience, and literary aspirations, respectively. First is Jeff O'Neill's 1987 Nord and Bert Couldn't Make Head Or Tail Of It where the player must venture into six districts of Punville to gain the necessary ranks to eventually confront the mayor and fix the word virus that has inflicted the town. Even more so than most Infocom games, Nord and Bert is acutely linguistically based, as the solution to each of the six major puzzle requires a verbal approach to puns. In "Shake a Tower," for example, the solutions revolve around the player recognizing spoonerisms at work and typing in the appropriate response; the player is confronted with "fed rocks," and must type in "RED FOX" so that the rocks transform into a fox that lead the player into the next area. In "Shopping Bizarre," the solutions require the player to recognize appropriate homonyms; when a chocolate moose blocks the path, typing "MOUSSE" turns it into a confectionery much easier to maneuver around. Like the image-based patterns Miyamoto introduced, parser-input text-based games teach the player a particular vocabulary, a set of commands and shortcuts that are commonly used. Montfort claims that what makes Nord and Bert valuable is that, while the commands it demands from the player were sometimes abuse, the back and forth of user input and computer response with the puns and jokes made the exchanges "less like a command-prompt exchange" and "somewhat more like a normal conversation" (163-4). I would add that, particularly in terms of what the game has to offer for text-based representation, what is valuable about Nord and Bert is the way that its reliance on puns and linguistic turns draws the player's attention to the conventions of the text-based

system, and to the potential it has to offer other modes of interaction.

Douglas Adams' 1987 Bureaucracy, on the other hand, is more a typical text-based adventure game, in terms of the way it calls on the player to engage in item-collecting, and puzzle-solving, and general exploration. Where it differs from the typical text-based game and videogames in general—is in its subject matter. Douglas Adams is better known as the writer of the *Hitchhiker's Guide to the Galaxy* series than as an Infocom designer, and indeed, the Infocom adaptation of the series was one of their best-selling games. Whereas *Hitchhiker* combined mundane elements like highway bypasses with interstellar dogfights, Bureaucracy consists almost entirely of the frustration and absurdity invoked by those mundane elements. In a typical exchange for the game, the player may go into a restaurant and ask for a meal. She will then be asked a barrage of questions about the meal: raw, rare, medium or well-done; barb-que sauce or not; melted cheese of either the Swiss, American, or Cheddar variety; bacon; mushrooms; choice of French fries, baked potato, salad; beer, wine, soda, or juice. Upon making the choice, the waitress' shift will promptly end, forcing the player to go through the entire routine again with the new waiter. And when that second order is placed, the waiter returns shortly after with a burger that bears no resemblance to the order placed.

This situation is typical for *Bureaucracy*. Throughout the game, the player is faced with similar tasks, including moving through queues at a bank in order to make a withdrawal, sorting through mail, navigating an airport, and coping with flight attendants. Any time the player accidentally inputs a command not built into the game, the blood pressure gauge rises, to the point where enough incorrect commands can lead to a premature heart attack. The gauge only decreases if the player chooses to wait several turns, making an in-game virtue out of

doing nothing. In short, *Bureaucracy* is a satirical game about frustration and boredom, about the effects of bureaucracy on the contemporary Western life. Modern games such as molleindustria's 2012 *Every day the same dream* show that there is nothing inherent about image-centred games that render them incapable of either satire or critiquing contemporary Western life. In 1987, however, *Bureaucracy* stands in sharp contrast to the spectacle-oriented and fantastic *Super Mario Bros.* 3.²² In its pursuit of boredom, in forcing the player to go through the motions of bureaucratic procedures, it caters to a more mature audience than the Nintendo bestseller—and for that matter, most of Infocom's own catalog, which tends towards pulp adventure situations.

The focus on language and complex themes in Infocom games is part of the framing performed by interactive fiction at large. As the home console systems drew on familiarity with television and the arcade, the text-based games attempted to exploit and re-appropriate the prestige of literature. This desire, at times verging on an anxiety, is clearly evident in some of the contributions to the *IF Theory Reader*, and indeed, "IF," short for "interactive fiction," is obviously a term that seeks to classify certain text-based games as a form of literature. In the collection, Roger S. G. Sorolla refers to any violation of the fictional world within an IF as a "crime against mimesis" (3), Mark Silcox argues that the player/game interactions in IF map onto the psychological realism of modernist writing, and Duncan Stevens' essay starts with the premise that "in theory, interactive fiction should be able to do anything that static fiction can do, as static fiction amounts to interactive fiction that consists of one move (>READ STORY)

²² Arguably, the closest *Super Mario Bros. 3* comes to satire is when, at the end of the game, when Princess Toadstool declares "Thank you. But our Princess is in another castle! . . . Just kidding!", a reference to the statement uttered by the rescued Mushroom Retainers in *Super Mario Bros. 1*—and even then, it is a metagame commentary delivered by text.

and more interaction should enrich the storytelling experience, not limit it" (101). The notion that is implied—and sometimes explicitly stated—by these authors is that interactive fiction, however game-like it may be, can and should also meet literary standards, however those may be defined.

These authors are all writing in the mid-90s or later, well into what Montfort calls the "era of independently created interactive fiction" (194), long after the text-based game ceased to be commercially viable, and developing text games became more of an auteur hobby than commercial venture. But the same attempt to claim literary value for this sort of text-based game existed in Infocom's time in the 80s decade. A prime attempt, and one more successful than most, was Steve Meretzky's A Mind Forever Voyaging (AMFV). In his survey of the game, Montfort notes that it was promoted from the start in terms of its literary value; he cites Meretzky's explanation that the PR for the game "was all geared toward spinning the game as the computer game equivalent of Brave New World and 1984" (153). Infocom established further literary connections: AMFV originally debuted at a press conference held in the New York Public Library; was named after a passage in William Wordsworth's *The Prelude*; and was structured with a series of epigraphs by William Marsden, Edgar Allan Poe, and Emily Dickinson. Last but not least, as with all Infocom games, the game's manual referred to it as an interactive fiction and a story, with an author, not a designer or programmer. On every level, A Mind Forever Voyaging reflected Infocom's attempt to sell its products not as games at all, but as literature.

The plot of the game has the player acting as a sentient computer, charged with working out the societal effects of a proposed fascist policy, Plan for Renewed National Purpose. These

effects are measured by engaging a simulation, and recording moments of significance to later present as evidence. As the player watches the proposed society crumble, the game amounts to a social critique against overly oppressive government measures. Aside from some high-level system management at the game's end, the primary action of the game required to progress is not fighting or shooting, but simply deciding which events should be recorded—it is a game about passively watching, a radical departure from the action-oriented console games of the time. While games operating around camera use, such as *Dead Rising* or *Pokémon Snap*, also focus on observation, these games are generally centred more on action, or framing the camera use as action. In its charged political plot, literary aspirations, and observation-based play, *A Mind Forever Voyaging* demonstrates how a text-based game may situate itself far away from image-based games, to the point where it can at least attempt to argue it is not a game at all.

Taking the original text-based game *Adventure*, Warren Robinett argued that a text-based game could be essentially converted into an image-based game. *Super Mario Bros.* series and Infocom present evidence suggesting that the equivalence is not so simple. *Super Mario Bros.* used the limited technology of arcade to create a recognizable character and brand, then created almost from scratch a type of image-based learning where the player learned to respond to purely visual patterns. In later games, it demonstrated the sophistication of these patterns, that they could be deconstructed or built upon, as designer and player saw fit. Infocom's text-based games took the technical limitations and cultural bent of the university to create a parser-based input system that could explore subjects the spectacle-laden console systems could not, whether it was the convoluted wordplay of *Nord and Bert* or the thematic presentation of *Bureaucracy*. With *A Mind Forever Voyaging*, Infocom posited that the text-based game, by

virtue of that text, could go further than image-based game altogether, to transcend from game into serious literature.

As I mentioned at the beginning of the chapter, W. J. T. Mitchell stated that image and text have been employed throughout Western history to advance various ideologies. At this point in game history, both were being championed to portray very different notions of what a game could be: for the consoles, that games were for children, and displayed fantastic worlds and spectacle; for the PC, that games could be interactive literature, capable of promoting thoughtful contemplation. Stated in those terms, the gap between the console and PC seems quite large, but a change in technology shifted the balance. As *It Came From the Desert* demonstrates, the PC gained the graphical prowess of the specialized consoles, and text and image were reconfigured in a new manner that incorporated both strains of games into its whole.

It Came From the Desert Part I: The Context of Amiga and Cinemaware

For most of the 1980s, arcade machines and home consoles could tout a graphic superiority the personal computer could not match. But by the mid-90s, that situation flips, and from that point on, personal computer capabilities drive videogame technological development. While the more widespread adoption of the PC is the subject of the next chapter, the 1989 Cinemaware game It Came From the Desert (or Desert, for short) for the Commodore Amiga illustrates the shift towards PC gaming and the merging of the streams of text-based computer games with graphic-based console games. The Amiga itself is an anomaly in the game industry at the time, as it was a personal computer designed for allowing unprecedented levels of home creativity and delivering arcade level game experiences on a PC. While *Desert* itself draws on the arcade, its primary inspiration is film, particularly 1950s horror cinema. What is more, in doing so, it not only combines image and text, it combines them in a way befitting its horror source material, where the text represents the player's growing mastery of scientific evidence, and the insects are terrible images that must be subdued. Soon, the game industry as a whole will shift more wholeheartedly to an overarching narrative that praises image to the minimization of text; in It Came From The Desert, there is an early example of how the two may support each other towards aesthetic effect.

In the games and platforms considered thus far, a simple dichotomy has emerged: the home console systems utilizing the television catered to image display, and the personal computer catered to text. The reasons for the divide are many, but can be split into three broad categories: inheritance, audience, and technological affordance, which in turn map loosely onto the three-circuit model of economic, cultural, and technological. The home console, even by

the end of the 80s, could still be traced to its arcade roots. The PC's inheritance came from mainframe computing, which supported longer, more sustained engagements with the system at hand, and catered to graphically simple designs and textual input. In terms of audience, the console systems of the 80s—especially the NES—was marketed towards young male children, whereas the PC game was typically purchased for a more affluent, older (though still male) consumer. Consequently, the console systems pursued images more likely to appeal to its core audience, while the PC games, particularly companies such as Infocom, attempted to create a more cerebral audience. Finally, the technology of the systems dictated whether text or image were more appropriate. With a system that utilized a television's display and a controller that had essentially eight buttons available for input, the NES was capable of more sophisticated maneuvers in terms of what input it could accept than most of its predecessors, but it was still ill-suited for a text-based game requiring a parser. And with the proliferation of PC models in the 80s, developers who wanted a broad player base needed to cater to the machines with the low-end graphic capabilities in order to distribute their games as widely as possible. PCs at the time were designed for processing operations other than games, and most were simply not designed for producing high-end graphics.

The exception to this rule was the Commodore Amiga. In 1982, David Miner joined fellow former Atari employee Larry Kaplan at Hi-Toro, a company Kaplan had founded to create the next generation of videogame consoles to challenge Atari. As Jimmy Maher reports in his book on the Amiga, *The Future Was Here*, Miner made two immediate changes as conditions for his joining the project: "this proposed game machine must be at least expandable into a full-fledged PC, and it must be built around an exciting new microprocessor, the

Motorola 68000" (14). The microprocessor gave the Amiga processing capabilities virtually unprecedented among the PCs at the time, and the decision to make it more than a videogame console proved prescient in 1983, when the company was looking for investors and the market for videogames had just collapsed. Still, that original focus on gaming meant that the Amiga was heavily geared towards high-end image and graphic output, another relative first for computers of its kind. Thanks to Kaplan's original vision and Miner's design, the Commodore Amiga had the graphic power of home console and the processing power of a PC, with each raised to levels beyond its immediate competitors.

The Amiga is well suited for a variantological approach, especially in terms of Maher's portrayal. Released in 1985 and obsolete by the early 1990s, the Amiga went from being ahead of its time to being a technological dead end. Held back by mismanagement and the various technological kludges that had once granted it its prominence, the machine became a relic. However, Maher makes an impassioned case for its value, citing it as "the first aesthetically satisfying PC," a device that "empowered amateur creators" by granting access to professional tools, and gave home users their first sustained glimpse into the potential of multitasking and the utility of user-authored software (6-7). The conclusion of the book sums up the Amiga's accomplishments: "the Amiga made many things possible *first* and in doing so gave the world a rough draft of its future" (269). And while the Amiga, with its emphasis on allowing users free reign to set their own system specifications, may not be the model for the comparative black box of many modern PCs, it is still important in terms of how its technology fostered a sense of artistic potential. Further, the Amiga is a significant variant in terms of videogames in the way it offers an alternative to the dominant history of the period. As discussed so far,

videogame history in the 1980s can be divided into two almost entirely separate groups: the image-based games of the arcade and home consoles, and the text-based games of the console. The Commodore Amiga demonstrates a more complicated history, as it possessed a game library with arcade level graphics on a PC.

It was that superiority that attracted developing studio Cinemaware to the Amiga, as it could offer what other PCs of the time could not. As its name suggests, in Cinemaware's case, the comparison the company was interested in was not other computers, but film. It turned out that Amiga's relative superiority for developing games was a double-edged sword; while they could offer an experience very different from other computers at the time, the hardware demands for that experience meant that these games could not be easily ported to other PCs. Consequently, anyone developing primarily for the Amiga risked severely limiting their potential market.

Cinemaware founder Bob Jacob felt differently; upon first seeing the Amiga, he switched from being a software developer agent to a designer, as, to him, the Amiga meant that "things were going to be different" (Donovan "Replay Interviews") and the Amiga "was going to revolutionize everything" (Barton). In interviews conducted decades later, Jacob characterizes PC gameplay at the time as largely unpleasant: the games were "crude," and "slow," with "keyboard interfaces, ugly graphics – a whole host of elements that would really serve to kick you out of the experience" (Donovan). Rather than existing PC games, Jacob chose to model his own games on two other existing media forms. One is the one expected from the company's title: "I also decided that movies would be a great and creative motif for doing games--people like movies, right? It gave us virtually an inexhaustible supply of ideas"

(Barton).²³

The other model is perhaps more surprising, given how antithetical the two platforms seemed in the 80s; seeing computer games as slow and unengaging, Jacob went to the arcade game for inspiration: "What I really liked about the arcade game was that when I was playing a game I couldn't think about anything else. I couldn't think about my problems with this thing or that thing. It took up all my attention and it definitely became a mood-altering experience" (Donovan). The model media for Cinemaware offer a stark contrast to Infocom, one worth investigating further as they divide into very specific image and print types. Cinemaware pursued the arcade for the intensity of the experience, and the movie so that the games would have a mass appeal for more than "just 12-year-old boys" (Donovan); both media are, of course, heavily based in image, with text playing a supporting role at best. For Infocom, however, the medium of inspiration was the novel and literature, text-based media. This aspiration towards the cultural capital of literature has always been a part of interactive fiction, from the novellas inserted in Infocom game packages to the essays in the IF Theory Reader contrasting interaction fiction with literary mimesis and stream-of-conscious writing. While Cinemaware games may appear to bridge the image-text gap that arose in videogames out of the respective technological affordances of console platforms and home computers, Bob Jacob's choice of model media suggest that the difference is still there, lurking beneath the surface.

It Came From the Desert is, in many ways, a typical game from the Cinemaware catalog, as it is a game with a movie-based premise and arcade-like action sequences. It is also

Jacob was also aware that there was nothing particularly innovative in using cinema was a model for games: "I was smart enough and cynical enough to realize that all we had to do was reach the level of copycat, and we'd be considered a breakthrough" (Barton).

probably one of the best-remembered of Cinemaware's titles, on account of its high concept, pulled straight from 1950s horror films: giant ants have invaded Lizard Breath, California, a small desert town, and, as geologist and scientist Dr. Greg Bradley, the player is tasked with rallying the townsfolk and fighting off the invaders. *It Came From the Desert*'s most notable feature is its ticking clock dynamic, which spurs the player to hurry onward through a mixture of cinematic and game time. But it also draws heavily on its original horror inspirations, in terms of authority and authenticity, creating a counterpoint to the earlier films by placing the player in the role of the scientist protagonist. The game places a premium in its early stages in gathering text information from human sources, but in its latter portions, it draws more heavily on image-based action, culminating in the monstrous image of the giant ant queen and the increasing staccato beat of the final countdown.

It Came From the Desert Part II: The Game

The manual for *It Came From the Desert* serves the dual role of explaining the game's chief mechanics and setting up its pulp origins and tone through the use of comic strips. As the manual explicates, the first part of the game revolves around convincing the mayor that the ant threat is real, by collecting evidence of the ants and verifying that evidence at the local laboratory. The second half, once knowledge of the ants is widespread (or the general invasion of ants on the ninth day, if the player fails to convince the mayor), consists of allocating local forces, fighting local ant incursions, and eventually tracing the ants back to their lair and laying a timed bomb next to the ant queen. And while the player is pursuing these goals, she is likely to be facing a myriad of brief mini-games, from a one-on-one ant shooting gallery to knife fights with the locals. In practice, most of the player's experience with the game emerges less from winning the action scenes and more simply figuring out when to be at specific locations in order to receive vital information and evidence.

Out of all of Cinemaware's output, Jacob admits that he had the least involvement with *It Came From the Desert*; the game was largely the brainchild of David Riordan (Donovan). Riordan had previous experience in both film and games: in the early 1980s, he worked as a consultant for LucasFilms, searching out new technology of interest, and was part of the team behind the laser disc arcade game *Freedom Fighter*, which used footage from the anime series that inspired it. Riordan's motives were similar to Jacob's: he had a background in film and wanted to make "games that were like movies," but the existing console videogames were too primitive, basically "programmers' toys" (Riordan). After he saw Cinemaware's first game, the 1986 medieval strategy game *Defender of the Crown*, Riordan sought out Jacob and pitched

what would be known as "that ant game." He also insisted on one of the game's most notable features, the ticking clock, a constant progression of time leading up to the ants' full-scale invasion on Day 15. "It's a narrative device," he explains. "You can't wait around. If you don't go and do something, even if that something is wrong and you lose, if you just sit and play it cautious, the ants aren't going to stop, they're going to overrun the town."

While the time management is the main activity of the game, It Came From the Desert constantly punctuates this basic act with brief arcade-oriented sections. As the player-character confronts a single ant, the game switches into a shooting mode that resembles the first person shooter genre that has not yet been created; in practice, it plays more like a real shooting gallery, with the ant moving back and forth across the screen, pausing to allow the player more shots at its antennae. When faced with a large group of ants, the game switches to a distant overhead view, where the ants are clearly visible, but the character is a tiny dot; while these fights are usually in the open desert, the game's end has the player weave through the mazelike tunnels of the ants' lair from the same perspective. A flight segment allows quick travel between areas, but the plane's vulnerability makes taking off and landing extremely hazardous. The other mini-games all involve interactions with the townsfolk. Driving around the outskirts of town, the player is likely to run into Ice and his gang, who will challenge the player to a first-person view game of Chicken—the only time in the game that the automobile the PC uses to travel is shown. On three occasions, particularly irritable townsfolk will attack the PC with a knife, initiating a quick bout of thrusting and parrying. Finally, if the player fails at any of these tasks or collapses from exhaustion, she has the option to play an overhead stealth game in order to escape the hospital prior to the proper mandated release. Little, if anything, binds all these

disparate elements together; as Jacob and Riordan say, they are there largely to provide the arcade pace and intimacy lacking from the "slow" play of the typical PC game.

If they do share anything in common, it is that they all act as potential sappers of the game's most valuable resource, time. All games, of course, require time to play. But the constant advancement of time is, as Riordan said, the defining feature of the game. Every second of real time counts as one minute of game time, and the game takes place over fifteen days, from June 1st to June 15th of 1951. Characters, evidence, and plot points can only be activated if the player-character is present to witness them at the proper time and place, and working those details out is a large part of the game. Most videogames involve the management of a number of scarce resources, typically things such as health, gold, items, magic power, and so forth. Despite its horror setting, It Came From the Desert makes it extremely hard for the player to die, or even lose health. Rather, if player-character Dr. Bradley collapses from exhaustion or injuries, he is transported to the local hospital, with a brief time penalty. The player is then faced with the choice of attempting to escape from the hospital or staying till released—failure of the first or choosing the second grants a major time penalty, of the rest of the day. In other words, the game replaces health management with time management, which has a major effect on gameplay. Time passes while the player travels from locations, with more time passing the further away a location is. And, depending on the day, travelling on some roads out of town come trigger random mini-game events, forcing the player to run the risk of winding up in the hospital, causing more time to be lost. Consequently, the conservative player remains at the centre of town, only travelling to more distant locales when absolutely necessary. The major source of tension of the game is that this scarce resource only goes one way. Players can speed up or pause the game, but nothing (save restarting or reloading) can regain time that is lost.

The subject of time in media has been a source of discussion for videogames and cinema. In terms of videogames, Jesper Juul has written on the subject in a 2004 essay, "Introduction to Game Time." In the essay, Juul divides game time into "play time (the time the player takes to play) and event time (the time taken in the gameworld)" (131); these times are roughly translatable to the diegetic length of a story or film in contrast to the time it takes the reader or viewer to go through it. In a reflection of his own passage through time, Juul later redefines event time as fictional time, to better correspond with his definition of video game as "real rules and fictional worlds" (Half-Real 1), a clear shift from his original, more hard ludological, position. Later still, in 2010, he clarifies that what is missing from this model is that "video game playing is rarely linear, but rather consists of the player failing, losing time, and retrying specific sections of a game" ("In Search of Lost Time" 87). In It Came From the Desert, the punishment for failure is always lost time, in terms of both fictional time and play time, though the game is actually rather lenient in terms of player failure; if, for example, the player fails to gather the evidence necessary to convince the mayor of the ants' existence, the ants invade on the ninth day, granting the player access to the town's military forces anyway. But the ideal playthrough, the one that completes all objectives, will likely require multiple playthroughs to reach, just for the player to master the action sequences and map out the schedules of Lizard Breath's inhabitants. The play time/event time model fails to account for this process.

In order to complete the It Came From the Desert, the player must go through what will

probably be multiple playthroughs of the game, and go through the disjointed action sequences multiple times—even if the player plays but a single time thanks to using a walkthrough guide, he or she is relying on the tertiary, recorded memories of others, and their own implied playthroughs. ²⁴ The knowledge gained from these playthroughs are then combined to stitch together one ideal playthrough, wherein the player goes from start to end (a successful traversal, as Montfort would put it). The resulting traversal is a melding of multiple time frames: the events depicted on the screen approximate the PC's diegetic consciousness over that period; the player constructs her own interpretation, creating a different montage of events; and the events themselves, the collection of evidence, the gathering of forces, the triumphant final battle—the resulting montage of events moves *It Came From the Desert* from the repetitious play of a videogame to the broad stroke form of an action movie. Game time not only unites player and character, but unites the game itself with its film origins. But that claim, we will have to examine its source material, the 1950s horror film, as it influences how the game approaches authority and internal/external threats.

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There may be some confusion as to the meaning of the terms "playthrough" and "walkthrough." In both cases, I am using them as they are typically used by game players. Playthrough refers to everything a player experiences in the course of playing a game through to either its end, or when the player chooses to cease playing. Walkthrough, on the other hand, refers to detailed, step-by-step account of how a player can achieve a successful traversal of a game.

It Came From the Desert Part III: The Authority of Text and the Videogame Terror

While the 1950s contain many films that many regard as classic, the horror films of the period are often derided as puerile and simplistic—the same accusation often levelled at videogames. Modern horror fans dismiss them as "monster movies" and theorists feel that these monsters are too simplistic to qualify for the social examinations of science fiction or the introspective complexities of horror (Jancovich 11-12). Scholars Peter Biskind and Mark Jancovich disagree sharply with these sentiments. According to these scholars, the horror films of the 1950s address a number of personal and social issues of the period. Separately, the two researchers identify a number of significant traits of 50s horror films, two of which are significant for the present discussion: authority, and threats from the interior and exterior. By virtue of being based at least broadly on the 1954 giant ant horror movie *Them!*, *It Came From the Desert* also incorporates these elements, but in ways suitable to the context of the videogame.

The game's treatment of authority is nuanced, as it both subverts and enables the player's ability to control events. In the genre of the original films, it is common for various levels of authority to distrust each other, only to come together to face off the threat at hand; as Jancovich says of *Them*!, the film "presents American society as a social order made up of a variety of different types of experts, all of whom have specialist knowledge in their own areas and must learn to work with one another to achieve success" (59). As a videogame, *It Came From the Desert* must take a different approach, as the videogame medium is less often about forging unity between disparate groups and more typically about a single character triumphing over swarms of faceless enemies. Essentially, the game splits the difference, as the player

single-handedly stops the invasion, but only after taking over the entirety of the military response: the major action of the game is convincing the town's mayor that the threat of the ants is real through the aid of a university scientist, then receiving unilateral control not only of the locals and police, but the nearby army base. Again, this control is eventually granted regardless of whether the player successfully finds all the evidence, but, if gathered in "proper" fashion, the process of procuring the evidence illustrates the melding of various authorities, just as in the film, and the unification of the game's visual and verbal rhetoric.

For a videogame, the unfolding of the truth, in the form of the game's plot, usually coincides with the increasing glory of the player, as she comes to master the game system. In It Came From the Desert, the plot of the game revolves around amassing evidence—what amounts to tangible truth—so that the legislative authority of the area, the mayor, cedes authority over to Dr. Bradley. The process combines a visual and aural product with textual authentication. First, the player must communicate with local townsfolk to determine potential sites of ant incursion, and the townsfolk's speech is presented in text. Once the player finds the site and recovers visible evidence of the ants' presence—either a sound recording, a limb, ant body fluid, or a cast of their prints—it is not enough to simply present these traces of the ants to the mayor as proof. Rather, the PC must travel to the local science laboratory, where Dr. H. G. Wells (the name an obvious tribute to the early science-fiction writer) verifies that the evidence points back to the insects. Even then, if the mayor is presented with less than four pieces of evidence, he will dismiss the findings and reject Wells' authority: "Doctor, you've got to understand something. Dr. Wells' reports aren't worth the paper they're printed on! He's an intellectual screw ball!". To convince the mayor of the truth behind the ant invasion, the player

must fuse the local verbal accounts and visual evidence with scientific verification. Only then, when the truth is fully acknowledged and open, can the various forces be united under the player's authority. This point is crucial: in *Desert*, in order for the PC to accumulate power, the player must transform objects represented by image and sound into a text-based narrative of evidence and fact.

Additionally, one of the most common discussion points for the 50s horror films is that they were mainly concerned with anxieties regarding the Soviet Union as a potential threat to the United States. The various invading monsters, from secret alien infiltrations to radioactive giant insects to shapeless blobs, are thus all surrogates for Cold War anxieties. However, both Biskind and Jancovich contend that this view has been overstated (111; 2, respectively). *It**Came From the Desert* also has an exterior/interior tension, one that exists on a narrative level, but also has relevance on a more fundamental level, in the way the player is always separate from the game. The tension capitalizes on a difference between horror and terror articulated by Noël Carroll, wherein horror refers specifically to presence of monsters, but the term "terror" can be used to describe effects more psychological in nature (15).²⁵ The exterior, horror-based side of the tension comes from the invasion of the ants, whose monstrous images will appear in more detail in the next section. The terror-based interior begins with the PC's—and the player's—own status of outsider.

The alienation stems largely from class issues, as Bradley's status as geologist puts him at odds with the majority of the inhabitants of Lizard Breath: farmers, miners, the locals who

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Note that there is potential for a great deal of overlap for these terms, and that this division is not always rigorously maintained; in common parlance, what Carroll would call terror is often called horror (the category of "psychological horror," for example) and other theorists, such as Eugene Thacker, do not distinguish between horror and terror.

inhabit the bar, quarry workers, and construction workers all mistrust and, to some extent, resent, his presence. (This distrust is particularly acute for the construction workers, who will go so far as to encase the PC's feet in cement if he bothers them often enough.) And that list is only considering the NPCs that are unnamed; the gang leader Ice, Neptune Hall leader Billy Bob Morse, the Mayor, and the reporter Bert are all varying degrees of hostile. Those who are friendly to the PC are in outsider roles themselves, due to being foreign to Lizard Breath—the fortune teller, and the French aviator Louie la Rue—or due to their position—Dusty's role as female radio personality, and Dr. Wells' role as scientist both set them apart. There are more characters that could be presented on either side of the equation, but the point remains the same: the town's response to the PC is mixed at best, and many resent his authority and presence. Bradley, for his part, begins as almost equally contemptuous, with constant references early in the game to how boring the town is: it is one of the "least interesting places," where "jokes are worse than the coffee," and is most notable as a "tumbleweed truckstop." In part, the emphasis on the boring existence of Lizard Breath is to contrast the later chaos of the ants, but the basic point remains that before Bradley is in a position to organize forces against the ants, he must first reach a basic level of understanding with the townsfolk.

At this level, the interior threat is more discomfort than anything else; the estranging terror arises when consideration shifts from the player-character to the player. An outsider entering a strange town is a common trope in videogames (not to mention cinema and literature), used in games as varied as *Animal Crossing* and *Silent Hill* 2. In terms of narrative, it serves to unify the player (or the viewer, or the reader) with the protagonist, as it means that

both learn about the location and its inhabitants at the same pace. Simply put, it is a convenient diegetic tool for exposition. It is significant, then, that *It Came From the Desert* keeps the outsider trope, but starts in media res, so that Bradley is familiar with the townsfolk, but the player is not. The player not only has to figure out the comings and goings of the inhabitants of Lizard Breath, but also Bradley's own sporadic reactions to them, which includes seemingly disproportionate rage and contempt. The result, rather than the game encouraging the player to bond with character, is that the player is placed at a distance. This distancing fits well, however, with the core of the game, trying to decipher the schedules of the characters in order to be on hand when they impart important clues and evidence. In the process of gathering all necessary evidence to unite the town, the player will, by necessity, learn enough about the people of Lizard Breath to move from a state of exclusion to inclusion. Like the original horror films that inspired it, *It Came From the Desert* has its protagonist come to terms with the interior alienation before dealing with the outside threat—the horror represented by the monstrous image of the giant ants.

It Came From the Desert IV: The Horror of the Image

There are two important questions to answer regarding *It Came From the Desert*: whether it is a horror game, and how it fit within the larger discussion of image and text in videogames. The answer to the first question relates directly to the second. Being based on a horror film does not guarantee that the result is also part of the horror genre; film parodies from Young Frankenstein to Scary Movie can attest to that much, so some other criteria is needed. As editor of the anthology Horror Video Games: Essays on the Fusion of Fear and Play and author of Silent Hill: The Terror Machine, game studies scholar Bernard Perron is as expert as any on the subject of videogame horror and terror. In the first chapter of the latter, he outlines the survival horror genre, in terms of its history, common game elements, and its connection to cinema. The common elements include sophisticated graphics and sound, a fixed third person perspective, lack of a map, limited inventory, and limited save options (21-25). It Came From the Desert, however, has almost none of these things. Granted, it has sophisticated graphics and sound; that was, after all, what enticed Cinemaware creator Bob Jacob to the Amiga to begin with, as I said earlier. But the others hold only under specific conditions: there is a fixed third person perspective, but only during some segments; more often, the player will be operating from first person, or the disembodied, "god-view" of the game map. And it not only has ingame map, but most of the game's action is spent using it to travel from location to location. Further, saving can be done at any point when the map is open; the save button counts almost as a location with its spot in the map's upper left corner. Finally, for what little there is of it, the inventory is unlimited, except when the player is particularly wasteful during the mass-ant attacks, and may run out of weaponry.

Elsewhere, Perron comes up with a different description of videogame horror, based around the notion of the body: the bodies of the monstrous enemy, the desecrated body of the player-character, and the body of the player ("The Survival Horror"). The enemy's body inspires fear, the way it destroys the character's body creates horror (in the sense described in the previous section), and tension (terror, though Perron does not describe it as such) results from the presence, agency, and embodiment of the player in that character. Again, It Came From the Desert fails to the meet the criteria exactly. The player is kept at a distance from the character, either by Bradley's strange thoughts in first person, the distance in the overhead third person game, or the even greater sense of distance in on the world map. Most notably, it fails in terms of the player-character's body. Perron argues that the gamer "is most effectively overcome by horror when he is actually seeing his player character being (b)eaten to death" (132). But in *It Came From the Desert*, death approaches but never arrives; the moment is always deferred, and the player wakes up again in the hospital, with a little more time taken from the clock. Even if the player loses on the final day, the text suggests that some survivors escaped, creating a small sliver of hope that Dr. Bradley is among them. Regardless of which set of Perron's criteria is applied, It Came From the Desert does not quite fit the definition of survival horror. It is thus a variant, set apart by its own design from what is considered the norm in horror videogames.

However, I maintain that the initial experience of *It Came From the Desert* is a horrific one, whether this encounter is framed in terms of survival or not. The horrific encounter stems largely from the way the game uses the two elements of Perron's survival horror that it does satisfy: monstrous insects and the cinematic connection. In the first section of his discussion of

the horror genre in Silent Hill: The Terror Engine, Perron draws on Vera Dikas' and Ruth Amossy's scholarship to argues that horror films are already essentially ludic in nature, that their formulaic nature turns the exact details of their plots (who will die first, who is the killer, etc) into a game for the viewers to watch as spectators (14-15). Perron notes that the Scream film series is very self-conscious about this play; the more recent film Cabin in the Woods takes the point to the extreme, by showing the complex betting pools characters in the film have constructed to wager on exactly which monstrosity the unlucky teenagers will unwittingly unleash. Following Noël Carroll's analysis of film, Perron notes that the connecting thread between games and cinema in this respect is repetition; rather than deter the audience, the repetition of a horror film, as in a game, is not a deterrent: "It's precisely the noticeable variations within the framework, the efficacious scare tactics and the novelty of the techniques, that thrill horror enthusiasts and reaffirm their appreciation for the genre; it is a way simultaneously both to maintain and to lose control over the experience" (16). The videogame, he argues, functions through the same process of repetition. This management of time is not just an element of most videogames, but the primary, driving action of It Came From the Desert. In constructing the ideal playthrough of the game, the player is forced to reconstruct the form of a horror film and action movie.

A game mechanic based on the manipulation of events in time is hardly enough to qualify a game as horrific or terrifying; if that were the case, nearly every videogame would suffice. Rather, to show why the initial encounter with *Desert* is particularly horrific, the exact horror invoked by the giant ants must be considered. In a survey of pop culture giant insect portrayals, Richard J. Leskosky says that the basic movement of a film featuring mammoth

sized insects is a rewriting of natural order, with man at the bottom; pithily, he observes that "It is how the apocalypse would have gone if the writer of Revelation had not been John but an entomologist" (335). Indeed, *It Came From the Desert* draws on this reversal at points, such as in the final failure splash screen, where the text solemnly declares that "We fought bravely, but in the end *time ran out*. [emphasis added] Those of us that survived, made our escape as the ants demolished the town. Lizard Breath was no more, and on this half-acre, man was no longer in control of his own destiny." At this point, the ants have moved from destroying the fringe of Lizard Breath to decimating its core; interior has met exterior, and shattered, creating a new order. The passage implicitly links time management to the ants and a new order of nature where man is not in control.

Leskosky also observes that ants themselves, regardless of size, are horrifying to people because they look so different from us, they are ubiquitous, and yet "they ignore us totally except when they feed on us" (332). This horror is very different from Perron's body play, as it is not so much about affecting the human, but ignoring the human entirely. It is horror of the type defined by Eugene Thacker in his book *In the Dust of This Planet*:

I would propose that horror be understood not as dealing with human fear in a human world (the world-for-us), but that horror be understood as being about the limits of the human as it confronts a world that is not just a World, and not just the Earth, but a Planet (the world-without-us). This also means that horror is not simply about fear, but instead about the enigmatic thought of the unknown... Horror is about the paradoxical thought of the unthinkable. (9)

Thacker's terminology requires a little unpacking. He defines World as the world-for-us, the

world in which human beings interpret and create meaning regarding the world around us, that which we have access to and shape for our own ends (4). The Earth refers to the world-initself, the world as it exists beyond our attempts to engage with it; it is a paradoxical concept, because the moment we name The Earth and try to think about it, it becomes World. Finally, Planet is the world-without-us, the subtraction of human from the world. This world is not antagonist towards humans, but is at once "impersonal and horrific." Horror, by Thacker's definition, is the consideration of the world without humans at the centre—though by defining it so, Thacker reveals how the previous definitions of horror and terror elide and implicate each other, that the physical and psychological experience overlap.

In Thacker's sense, ants (and most insects) are indeed horrific, and the behaviour of the ants in *It Came From the Desert* qualifies them as well. While they will attack the player if the PC gets too close, for the most part, they will ignore Bradley if he stays away. Regardless of what the player does, their invasion, left unchecked, will follow the same mindless pattern. Even when invading their nest at the end of the games, the ants will only surface near the PC until a certain number of them are on the screen, and then only attack if the PC gets too close; the ant queen is entirely indifferent to the PC's presence. Where the indifference passes from horror to terror is in the game's time management. The ticking clock of *It Came From the Desert* means that the game goes on whether or not the player takes control, marching on through its fifteen day cycle, the same characters moving to the same places whether or not the PC is there to greet them. In my first playthrough of *It Came From the Desert*, I was constantly travelling to locations only to find them empty, the characters indifferent to my presence. The initial experience with *It Came From the Desert* is a horrific and one because it requires the

player to come to grips with a game that does not care if the player is at its centre.

It Came From the Desert Finale: Rationalizing Words, Taming Images

To bring this discussion on It Came From the Desert back more directly to the image and text, it is useful to look back for a moment and take stock. At the end of the 1980s, a period of experimentation under technical and financial limitations had moved videogame image and text in a dichotomous state, with the console systems and arcades supporting image-heavy games, and the PC supporting text-heavy games. The Commodore Amiga, an experimental technology in itself, challenged that split, by virtue of being a PC designed in part for graphic processing, and designers such as Cinemaware's Bob Jacob and David Riordan saw it as a way to make games more cinematic—and, in the process, more image-centred. In practice, the game combined a time-management system with arcade-like mini-games, and, in order to complete the game, the player had to collapse her experience and the player-character's experience into the general form of the action/horror film. In game and story, It Came From the Desert draws from its 1950s cinematic roots and extends them into a gaming context, as it, plays with the connection between authenticity and authority, and uses the transition from outsider to insider to frame the player's experience with the game. In terms of the videogame genre of horror, It Came From the Desert is, for the most part, an awkward fit, as it lacks a clear focus on the PC's body, and the typical scarcities of resources. Rather, the horror of It Came From the Desert rests in the way the game presents itself, originally, as beyond the player's control and comprehension, a series of random events that unfold regardless of her participation.

As described earlier, W. J. T. Mitchell found a similar sense of incomprehensibility in Edmund Burke's response to the French Revolution. Mitchell notes that Burke's *Reflection on*

the Revolution in France kept straying into a reflection of the spectacle the revolution provided, without any thought of the social context it arose from (143). Though there is obviously a great deal of hyperbole involved, and a watering down of the term, those who employ the term "videogame revolution" are frequently referring to the medium's capacity for spectacle. ²⁶ It was spectacle, after all, and the chance to combine the spectacle of the arcade and the cinema, that drew Bob Jacob to the Commodore Amiga. And in *It Came From the Desert*, the giant ants, are, obviously, the spectacle, the monstrous, menacing image that darts massively across the screen only to rear up in front of the PC in the shooting gallery scenes, and massively outsize the player in the top-down ant horde sections. And it is not just the ant scenes—in all of the action-based scenes, the image dominates, with a few labels and numbers to indicate how many weapons or how much fuel the PC has left. Aided by canned sound bits and a few odd screams, the images of the game encapsulate all visible threats that strives against the faceless PC.

And text, the digital word, is what allows the player to turn that chaos into order. The breakthrough in any player's experience with *It Came From the Desert* is when the player realizes the value of the game's telephone system. In *Gramophone, Film, Typewriter*, Kittler describes the mystification that surrounded the early gramophone, that the ability to project beyond our immediate senses granted it a spectral capacity; in the fictional 1950s town of Lizard Breath, it is exactly such projection, through the telephone, that brings Dr. Bradley and the player into the flow of the town. At any location with a telephone, the player may choose from a written list of telephone numbers and names. Once the player makes the selection, the

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As a few examples of the use of this phrase, see the 2004 PBS documentary *The Video Game Revolution*, the eGameRevolution exhibition at the National Museum of Play in New York, and Heather Chaplin and Aaron Ruby's *Smartbomb: The Quest for Art, Entertainment, and Big Bucks in the Videogame Revolution*.

communication begins, and one of three things will happen: the operator will inform Bradley that no one has answered or the call cannot be completed, the operator will make a brief comment and then the intended person will speak, or the game will cut straight to the intended speaker. Notably, the latter two will occur only if the recipient of the call has an event during that day that can be activated if Bradley travels to their location.

In a game where flying an aircraft is abstracted mainly to landing, taking off, and watching a fuel gauge, and where driving a car is only represented when there is a significant chance that car may crash, it is useful to note what is emphasized and elided in the process of a telephone call: the player must move the cursor over the number she wishes to dial, rather than merely select the person to call from a menu using the arrow keys, as is usual for conversational choices; the effort required to make such a call is thus slightly less non-trivial than otherwise, and the hand-written display of the names and numbers is foregrounded. Consequently, the game thus focuses on the link between the text of the characters' name and number, and the resulting text-based information they provide. Further, it is important to realize that the phone calls are never substitutes for going to see the character in person, as they indicate that the character has information, but never fully bestows that information to the player. Rather than acting as barriers to physical face-to-face meetings (or at least, their ingame digital approximations), an accusation commonly levelled at communication devices, the telephone service in the game encourages such meetings, by focusing on the direct link between characters and subsequent information, and alerting the player to the characters' current location and relevance.

Canny players quickly develop a strategy: every morning (or, at least, when business

hours start at nine), they phone everyone available, to ascertain who has relevant information for that day. From there, they can plan which locations they visit and when, putting together a virtual travel itinerary for the day. Through this method, it becomes relatively easy to gather all the necessary evidence to present to the mayor, and still have considerable time to pursue any other relevant activities for the day. In this sense, the initial encounter with the terrifying, uncaring game is conquered above all through technology represented by text, and the PC shifts from an outsider to one intimately versed with the town's people, conversations, and routines. The image of the monstrous ants is tamed through text that alerts the PC to their presence, confirms that presence, through the scientific verification described earlier, and, finally, confers the PC with the mandate and power to strike back and dominate. Couched in these terms, the ideal cinematic narrative of *It Came From the Desert* is the familiar videogame model of the lone protagonist growing to master more numerous but less skilled foes.

But there are two other models for considering the overall play of *It Came From the Desert*, ones that see the player as something other than the dominating force. Using the *Deus Ex* series as his centrepiece, Will Slocombe combines Althusserian interpellation with Ted Friedman's claim that videogame players are cyborg, in that they internalize the logic of the program in order to master it. Slocombe argues that this internal interpellation works on the player in a game, and beyond the game: "The game forces the player to think in certain ways, ways that continue past exiting the program" (46). He asks, "who has not, after a particularly heavy bout of gaming, started interacting with the world as if it were a game?" (47). Rather than master the system, he argues, the player becomes subject to it. Even while playing *It Came From the Desert*, it becomes clear that the telephone method, by virtue of offering the

easiest way to proceed in the game, crafts a particular sort of player. It calls on the player to focus only on those characters and locations that can be reached by the telephone, to stay at locations nearest to the center of town in order to maximize the schedule at hand. The farmers, the construction workers, the fortune teller at the edge of town—the player utilizing the telephone strategy will never visit any of them, unless someone reachable by telephone directs them there. The result is an information network hierarchy, with the telephone operator at the center, and those not connected directly in the margins.

If *It Came From the Desert* enforces an ideology on its players, it is not the us versus them or mistrust of authority that came with the 1950s horror films. Rather, the game encourages players to become subjects of resource management, allocating their schedules in the manner that allows them to best manage their relationships in order to produce the highest amount of information and authority. Granted, most games perform a similar process, but *Desert*, through its focus on time management, foregrounds it more than most. In *The Question Concerning Technology*, Martin Heidegger argues that the system imposed by technology encourages people to view everything in terms of standing reserve, their potential as a resource (17). This view is exactly the prevalent one of *It Came From the Desert*, as it calls on the player to treat time itself as a resource to be managed and expended. The text of *It Came From Desert*, then, is less the force that allows the player to dominate the image, and more the force that transforms player into working subject, slave to the game's clock.

Other scholars argue that Slocombe's interpretation is overly technologically deterministic, if not outright inaccurate. Tanya Krzywinska, for example, argues that we do not accept the subject positions thrust upon us by games, because we understand the difference

between player and character. Rather, "Althusser's concept is useful because it enables us to talk about the way that a game-text constitutes us as players" ("Being a determined agent" 116). For example, a player of *Grand Theft Auto* does not leave the game with the desire to go on a real-life shooting spree. Rather, she leaves with a set of strategies. In light of that argument, *It Came From the Desert* does not transform player into working subject, but a working player, one who commonly enters games with a time-maximization strategy in mind. Krzywinska's version of game-based interpellation grants the player more agency, but in the case of *It Came From the Desert*, the end result is much the same, as the playing subject performs the same time-management processes that the player-character does.

In line with this middle between player dominating game and game dominating player is the third alternative, offered by Jussi Parikka, an alternative that places image and text in a less antagonistic relation. In *Insect Media*, Parikka delves into the writing of Roger Caillois as part of his larger investigation of insect-based perspectives. In game studies, Caillois is often referred to for his classification of games based on four traits: agon, alea, ilinx, and mimicry. Mimicry is commonly paired with concepts of make-believe and play, but, based on Caillois' earlier study of insects, wherein mimicry is associated more with the way insects such as butterflies and mantises employ it to transform their relationships with their immediate environment. To Caillois, Parikka argues, such mimicry was not merely a tool for survival but close to a "psychic disorder," a way of seeing space itself as something non-Euclidean (98). By so radically changing its relation to the environment around it, the mimic enters a new conception of space, where it is no longer at the center as subject, but subordinates itself to a flowing environment (100). Parikka then repositions this mimicry in terms of game studies:

"Because all games include a certain voluntary acceptance of a new world the game imposes, on the user/player, mimicry is an apt image to use to illustrate this more general function of games. Games are in this sense milieus that act as vectors for transformation" (107). The mimicry of insects, then, present a different way of interpreting a game about the eradication of insects. The players of *It Came From the Desert* are not struggling to dominate monstrous images, nor are they submitting to the dominance of the systematic word. Rather, they are attuning themselves to a new environment. From the initial terror of being utterly outside a game that can move towards its conclusion without player involvement to the discovery of the telephone information system to the final horrific invasion of the ant nest—an invasion that depends more on being able to navigate the twists and turns of the nest than actually battling the ants—by battling insects, the player becomes more insect-like, utilizing text and confronting image, adopting the behavior needed to weave in and out of Lizard Breath's gameworld.

Image and text have long been held in opposition in Western culture, the concepts of each used to advance certain ideologies and arguments. Embarking on the same sort of experimentation as the typographic modernists, game designers of the 1980s continued along these trajectories, pushed by cultural, technological, and economic norms to pursue primarily image or text, and create implicit arguments for their choices. In crafting the Atari version of *Adventure*, Robinett claimed image and text were equal, but at the same time, consistently framed image as text's natural and technological successor. In the *Super Mario Bros*. series, Nintendo took "the inevitability" (as Iwata put it) of Mario's design, shaped by limits of technology, and used it to craft a new visual vocabulary. Infocom took the text processing

capability of graphic-limited early PCs and made it into a virtue, to port commercially over to as many hardware configurations as possible, but also to stake a claim for the literary nature of their videogames.

In this context of a technologically enforced image-text split in game design, *It Came From the Desert* is both a variant against its contemporaries, but also against the dominance of graphical realism that will soon be possible with the advent of CD-ROM hardware and widespread 3D graphics, as it offers a fusion of image and text that speaks back to traditional fears regarding the image while offering an alternative to that fear. Designed for a system that itself is a variant away from the PC standards of the time, lead designer Riordan made *Desert* using the arcade and 1950s cinema (both image-heavy media) as inspiration. In particular, the game's use of image and text speaks to traditional horror tropes: the image of the monstrous ants constitute the physical horror that acts as reference to the more psychological terror of the ticking clock; the text, through scientific confirmation and its use to represent the medium of the telephone, provides the authority to confront that image on its own terms. As such, the combination of image and text in the game presents a model for game design, one based not on the game controlling the player nor the player mastering the game, but ant-like attunement to a new media environment.

3. Text and the Myth of Graphic Immersion in DOOM and Myst

"Only in truly interactive entertainment do our souls see a mirror and that is exactly what Rockstar has told us it is doing since it started making *GTA* games." --game journalist Leigh Alexander, in a satirical post made shortly after the release of *Grand Theft Auto V*.

Introduction

In the previous chapter, I argued that the available technology in the 1980s shaped the course of game design for the decade, and, consequently, whether a game or piece of hardware favoured a prominently textual display or a graphic one. It was this starting point that led Nintendo and other home console companies to emphasize a new, graphic-based vocabulary of play as seen in the platform jumping genre, and their *Super Mario Bros*. series in particular. For personal computers, the proliferation of a wide variety of low and high power computers created an ideal, if brief, breeding ground for Infocom and text-based games, as the lack of graphics (or use of simple graphics, in later games) meant the games could be easily ported across many different computer platforms. *It Came From the Desert* was a variant (in the variantological sense) away from this text-image division, as it delivered an adventure that relied heavily on text and image, and configured them in ways established by pre-existing media forms, such as cinema and arcade. But it too was bound within the framework of the technology behind it, relying on the ahead-of-its-time Commodore Amiga to power its game engine.

The game industry of the 1990s also saw a massive expansion in terms of available

technology, starting with the console turn away from the NES. This shift begins in 1989, when the Nintendo Entertainment System receives its first serious competition in the North American market with the release of the Sega Genesis, ²⁷ which was definitively an upgrade from the ageing NES. In terms of specifications, the 8-bit NES was modestly equipped: 2 KB of RAM; 4 KB of ROM; five sound channels; a resolution of 256 x 240 pixels; and a 52 colour palette, with 16 displayable on the screen at once (Arsenault 113-4). In comparison, the Sega Genesis had 64 KB of RAM; 1 MB of ROM; six sound channels; a resolution of 320 x 224 pixels; and a 512 colour palette, with 64 displayable at once (Wittel). In short, in terms of sheer numbers, the Genesis was clearly the technological superior to the NES, and its appropriation of popular sports series such as *Madden* and the popularity of the *Sonic the Hedgehog* franchise allowed it to gain a foothold in the console market (Donovan).

Thus marked the beginning of the videogame equivalent of an arms race, with Nintendo releasing their somewhat delayed Super Nintendo system in North America in 1990. In 1994, a new generation of game consoles began, with Sega releasing the 32-bit Sega Saturn, and Sony entering the fray with the 32-bit Sony PlayStation. Nintendo jumped past its rivals with the 64-bit Nintendo 64 in 1996, though its use of cartridge over the cheaper to manufacture CD-ROM discs meant that individual games for the system tended to be more expensive. Sega's Saturn was not a success, and its attempts to recoup its losses with the 1998 Sega Dreamcast met with similar failure, eventually forcing them out of the console hardware market. The PlayStation 2 arrived in 2000, soon to be accompanied by the Nintendo Gamecube in 2001, and Microsoft's first console system, the Xbox, ushering in a new set of home console systems. To sum up, the

This console was not Sega's first foray into the North American market; the earlier Sega Master System had been released in 1986, a year after the Nintendo Entertainment System, though it never seriously challenged its NES contemporary.

90s were an era of rapidly changing technology for console systems, characterized by an explosion in memory storage and processing power.²⁸

Similar changes were occurring in other corners of the game industry. In the 90s, the personal computer in Western culture became a commonplace fixture in the home, and IBM emerged as the main manufacturer. As a result, the market for computer videogames became much larger, and much more homogenous, in terms of what type of computers users tended to own. As a further result, game developers developing for the home computer had a much easier time programming, distributing, and updating their software, now that a single program, MS-DOS (and later, Windows) became the most common operating system. While Microsoft had taken steps to pursue CD-ROM discs as early as 1985 (Allan), it was in the nineties that it became a common technology for the PC, allowing designers to add more video and memory-intensive 3D rendering to their games.

Even the handheld game hardware demonstrates a graphic-based progression, though a first glance may suggest otherwise. Nintendo's Game Boy, with its low resolution and monochrome graphics, was released in 1989, and cornered the handheld market for most of the 1990s. Its short-lived rivals boasted greater technology and graphics—the 16-bit colour Atari Lynx, the colour Sega Game Gear, and the Sega Nomad, which could play Sega Genesis games—but ultimately failed, due to factors such as high prices, inefficient batteries, and Nintendo's saturation of the handheld market. The end of the Game Boy domination came from Nintendo's own hand, with the 1997 release of the Game Boy Colour, and the eventual

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It should be noted that this list is merely a summary of the more popular systems. A complete list of all the variant home consoles is beyond the present scope, but it would include—among others—the Phillips CD-i (1991), the Panasonic 3DO (1993), the Atari Jaguar (1993), and the SNK NeoGeo (1994) (Wolf, "A Brief Timeline"). Notably, there were fewer new consoles as the decade wore on, signaling perhaps the level of market penetration by the existing brands.

2001 release of the Game Boy Advance, a 32-bit system still capable of playing Game Boy games. But even with a relatively low-tech handheld device like the Game Boy dominating the market for most of the decade, there is still a graphic-based progression, as can be seen by comparing games such as the 1989 *Super Mario Land* to the pseudo-3D graphics of the 1995 *Donkey Kong Land*.

This constant stream of technological innovation expressed itself directly in game designs that emphasized graphical mimesis, visual representations whose purpose was to appear as exactly like their non-gameworld counterparts as possible. The videogame advertisements of the time stoked the demand for such realism, promising "Live Action That Never Ends" for *Bases Loaded II* ("Dream Season"), as a single example among many. Admittedly, this rhetoric was hardly new for videogame advertising, and the pursuit of mimetic graphics predates the 1990s; one needs look no further than *It Came From the Desert* and the Commodore Amiga in the previous chapter for proof. For that matter, the overriding argument of this dissertation is that emphasis on superior graphics, often measured in terms of photorealism, is a goal taken for granted in the game industry. But it is in the 90s when—following the three-circuit model—sufficient advances in technology made it economically possible to pursue this graphic mimesis on a mass market scale, and a cultural demand for such products became the norm.

In this chapter, I will elaborate on this graphical mimesis through case studies of two of the most influential PC games of the period: id's *DOOM* and Cyan's *Myst. DOOM* and *Myst* both demonstrate how adapting to the PC's new technological affordances and audience base lead to phenomenal success and game franchises spanning multiple iterations. But while

DOOM's frenetic speed and 3D action set the stage for the modern First Person Shooter and contributed greatly to the "hardcore" gamer culture, *Myst*'s catered to a general audience at a more leisurely, contemplative pace using the new CD-ROM technology to capitalize on its visual superiority over its nearest game relative, the graphic adventure game. Both games were used to further a drive for graphical realism, but in both cases, such realism fails to account for the role text serves in them. The alternative to graphical realism will surface in the next chapter; for the moment, the focus will be on games that made it their selling point.

Mimesis in the Western Tradition

Before taking up with the games, it is worth first establishing what has traditionally been meant by the term "mimesis." It is a term that has changed gradually over time, becoming the focus of much debate in literature and academia (and by virtue of inspiring debate, it shares something in common with terms from game studies that are notoriously difficult to place-"fun," "play," and "game" itself, among others). In Western philosophy, the discussion of mimesis famously begins with Plato and Socrates, who postulated that fiction would have no place in his utopia in Book 10 of *The Republic*. Socrates begins by setting up a triad of types for any made object: there is the ideal form of the object, which a god makes (or no one makes, as Glaucon, Socrates' conversational partner, suggests); the particular example, which a carpenter or craftsman makes; and the representation of the particular, which the artist makes. The ideal form is the true form, but in making a representation, the artist is not even making an imitation of the truth, as the crafter does, but the imitation of an illusion (300-1). Further, as far as fiction goes, the poet is a step further removed from reality than even the artist, as "the poet uses words and phrases to paint coloured pictures of each of the crafts, even though he knows only how to imitate them; so that others like himself, who look at things in terms of words, will think he speaks extremely well about shoe-making or generalship, or anything else, provided he speaks with meter, rhythm, harmony" (304). Socrates frames mimesis as an issue of imitation and falsehood, in which the more abstract the representation, the further it is from the original ideal. The fault with mimesis, and with those who would write fiction, is that its root is a lie, a falsehood that approximates knowledge of the real world by appealing to artificial patterns the audience finds familiar.

The counterpoint to Plato's condemnation is Aristotle's *Poetics*. Aristotle immediately grants that tragedy, comedy, epic poetry, music, and hymns are all imitations, albeit with some variation between them (2). But he also argues imitation is essential to being human: "For just as to imitate is natural to human beings from childhood..., so also is it natural for everyone to take pleasure in imitations" (8). Imitation, he claims, is an integral part of learning, and it is because of this learning that we take pleasure in mimesis. Further, far from being the misleading structures that lead people astray, as Plato would have it, harmony and meter conform to a natural rhythm that encourage people to imitate superior examples, or avoid following inferior examples (9-10). Most of the rest of the *Poetics* focuses on the kinds of imitation, what is appropriate to each, and what forms are superior to others. In the conclusion, Aristotle declares that tragedy is the highest such form, above the epic for a multitude of reasons: it can contain everything the epic has, it utilizes music and spectacle to full effect, its vividness follows from both reading and acting, it is generally shorter and thus less chance of being diluted, and it more closely follows a unity of action (70-71).²⁹ In Aristotle's estimate, then, fiction is not about deception, but about creating suitable models for imitation, and some models are inherently better suited for this purpose. Aristotle counters Plato's condemnation and replaces it with a hierarchy.

Neither figures were thinking of games when they spoke of mimesis, and it goes without saying that neither intended their writings to apply to videogames, or the depiction of image and text within those videogames. Nevertheless, considering their comments in such context is a first step for appreciating what image-based mimesis means in terms of videogames. Plato's claim, that written language contains more artifice and potential for

²⁹ Most of these points, it should be noted, could also be said about a compact videogame.

deception than a visual-based medium, can be seen as an early salvo in the history of the image versus text issue in Western culture. Aristotle's argument that learning occurs primarily through imitation is essentially the argument behind the development of serious games, or so-called "edutainment." Further, Plato's statement that the version of an object closest to its true form is the abstract concept, coupled with Aristotle's argument that some forms of expression are inherently better suited for mimesis than others has parallels in the formalist case for defining games, and its opposition in Twine games and "non-games." Perhaps most relevant to the issue of games and mimesis is that videogames present a mimesis of a completely different type than those Plato and Aristotle consider, combining representation with action. That is, someone playing *Hitman* is not just observing a re-enactment of an assassination; she is actively performing the surveillance, preparation and execution of that event. What is the line between game and simulation? In Plato's terms, is a game further or closer to the ideal form than the artist's version? (And, as a corollary, what happens when the artist and craftsman of the particular are blurred—is the player-character comparable to the role of the actor in Greek theatre?) In Aristotle's terms, does the spectacle and vividness of a videogame make it a more compelling imitation? Exactly what is being compelled?

Some of these questions are beyond the scope of this dissertation, but they are worth bringing to mind as they illustrate that the history behind representation in videogames long predates the medium at hand. It will hardly come as surprising that Plato and Aristotle are far from the last word in discussions of mimesis. In his book summarizing the history of the term, Matthew Potolsky argues that there are three broad interpretations of mimesis that follow from

James Paul Gee's *What Video Games Have to Teach Us About Learning and Literacy* is a foundational text on the subject of videogames and learning; Daniel Joseph has aptly framed the most recent debate on the subject of videogame formalism ("Formalism: Once More With Feeling.")

Plato and Aristotle: mimesis as outright imitation, mimesis as performance and theatre, and mimesis as realism. First, mimesis as imitation follows the concept that Aristotle emphasizes, imitation of people's direct actions, as well as the imitation of existing forms of composition. Potolsky explains how this principle operates: "Imitation makes the original an original, renders it a 'classic' and a model for further imitation. Far from simply echoing the greater forerunner, imitation transforms the original into a recognizable set of conventions. Imitation is the effective origin of tradition itself" (52). It is the imitation, then, that turns the model form into a model to begin with, rather than a one-time event or anomaly, and converts its structure into a repeatable form. Potolsky's examples of such imitation are classical literature: Virgil imitated Theocritus, Horace imitated Pindar, Seneca imitated Sophocles. 31 Likewise, in videogames, similar traces of imitative mimesis can be found. Super Mario Bros. 3 built on the visual vocabulary established by Super Mario Bros.; DOOM is the clear template for future games in the First Person Shooter (FPS) genre. Even the aforementioned *Donkey Kong* Country manual is, like the game itself, through the character Cranky Kong, the now aged former villain star of the original, upfront (and mocking) about the connection between the videogame and its predecessor, *Donkey Kong*. Imitative mimesis is about history and traces, transforming paratext into lineage.

Mimesis as performance, on the other hand, "arises not from the distinction between a real original and an illusory copy but from a particular kind of action and attention, from the 'doings' of actor and audience rather than the 'being' of the spectacle" (74). The actors pretend that the acts they perform are actually happening, and the audience tacitly agrees to act as if

There is some resonance here with Harold Bloom's *Anxiety of Influence*, though Potolsky portrays the connection between works and their predecessors more positively.

they are both happening and *not* happening—a murder on stage, for example, will not provoke audience members to attempt a citizen's arrest.³² Following Josette Féral, Potolsky notes that this type of mimes is is marked by the division of space, that the area of the stage is marked as different—theatrical rather than quotidian, to use Féral's terminology. The obvious videogame comparison is Johan Huizinga's "magic circle" concept, the idea that there is a magic circle surrounding the area of play that marks the rules complicit in a playing session as "different" from other realms of activity. The magic circle has been the source of much contention and clarification in game studies, ³³ and much of that contention revolves around how incomplete that magic circle is; a distinction between audience and actors falls apart rapidly when the audience and actor is one and the same (although admittedly, some practitioners, such as Bertolt Brecht or Augusto Boal, have tried to deconstruct theatre in similar ways). As relevant for current purposes, "magic circle" can stand in for how separate a given gameworld is from the real world, how "immersed" the player can become in that world without anything drawing the player's attention to the outside world, and how much control the player has to control the player-character exactly as he or she fit. In terms of an 80s text-based game, performancebased mimesis would include how many phrases and words the parser can recognize; in a graphic-based game, it would include whether the player could interact with everything she sees. In essence, it includes that which helps a player play a role within a gameworld.

There is another significant connection between mimesis as theatre and videogames, one especially relevant from this period on: mimesis and censorship. Throughout the history of Western theatre, there have been calls for its censorship, generally on the basis that it inspires

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³² This version of mimesis shares some similarities with Kendall Walton's "mimesis as make-believe."

See, for example, Mia Consalvo's "There is No Magic Circle," David Myers' "Circles tend to return," and Marinka Copier's "Connecting Worlds: Fantasy Role-Playing Games, Ritual Acts and the Magic Circle."

bad behaviour through its example, and general falsehood. But Potolsky considers a slightly different argument presented in Jean-Jacques Rousseau's Letter to D'Alembert on the Theatre, wherein Rousseau calls the actor a master in "the art of counterfeiting himself... forgetting his own place in dint of taking another"; the actor is "fit for all sorts of roles except for the most noble of all, that of man, which he abandons" (qtd. Potolsky 83). Rousseau is arguing that the threat of acting is not just that it leads the audience astray, but also that it has potential to harm the actor, rendering him incapable of genuine behaviour that has not been filtered through his imagined roles. There is a clear parallel to videogames here, where the player can be considered both performer and audience through control of the game and the player-character. Concerned parent groups and politicians—Jack Thomson being one of the more vocal of the latter—have lobbied for restrictions and outright bans on the sales of certain games, on the grounds that playing through violent and sexually explicit events will leave an impact on the young players. Games prior to the 90s were also (usually rightfully) condemned for such content, with Death Race and Custer's Revenge being two of the more prominent. But I would argue that it was the 1990s where the issue of game censorship became visible in the general public, for a few different reasons. First, Nintendo had successfully branded videogames as toys for young boys, which meant that most people viewed them as material that needed to be child-appropriate. Second, there was the push-back against Nintendo's own censorship. As I mentioned previously, as part of their quality control efforts, Nintendo had carefully filtered out extreme violence or sexual innuendo in their products. But as the young boy demographic aged into male teenagers, the demand for sex and violence increased, and companies like Sega were quick to acquiesce, with games such as Mortal Kombat including the blood and fatalities

that the Nintendo version left out. Nintendo was forced to follow suit to stay competitive, and there was a quick escalation of gore and spectacle in popular gaming. Third, and most relevant to a discussion of graphics and text, the graphic improvements of the 90s meant that the depictions of violence and gore were much more realistic than they had been previously, which in turn worried concerned parties that the violence was much easier to imitate. Of the games featured in this chapter, *DOOM* in particular found itself at the centre of such controversy. Mimetic performance, if nothing else, raises people's concerns about what is being performed, and who is performing for whom.

Potolsky's third type, mimesis as realism, is probably the most common interpretation of mimesis, to the point that the two terms sometimes seem synonymous. The problem with defining realism more exactly, Potolsky notes, citing Raymond Williams, is that the concept of real hangs on two almost contradictory notions (94). Indeed, this contradiction is present all the way back in Plato's *Republic*. A creator striving for mimetic verisimilitude could attempt it by copying the craftsman, trying to duplicate the material appearance of an object. Or the creator could attempt it by copying the abstract form, as what we sense of an object is not necessarily its true nature—but these two concepts are, for the most part, mutually exclusive. In other words, the question at hand is whether realism entails an accurate account of an object in an absolute, objective sort of way (bringing to bear whatever assumptions that objectivity may entail), or an account of an object in terms of how the human senses can perceive it.³⁴ In videogames, this realism is often afforded by graphics; hence the drive for photorealism, for

One of the many attempts to address this issue of what an object is, rather than just how to represent it, is called object-oriented ontology; I raise it here because it is the methodology of choice for prominent game scholar Ian Bogost, as he outlines in his book, *Alien Phenomenology*. While the book isn't about videogames solely, it is probably the most prominent attempt to create a theory of ontology that addresses videogames.

example. Particularly relevant to game design of the 1990s, the technological improvements meant that more and more games could perform real-time 3D rendering, which meant that the game could simulate three dimensional space, making it that much closer to a proper duplication of the "real," however that real may be defined.

This version of mimesis has gained considerable prominence in literary theory, as evidenced in Erich Auerbach's seminal work, Mimesis: The Representation of Reality in Western Literature. It is worth exploring the book in some detail to illustrate the prominence it grants mimesis throughout Western history. In Mimesis, Auerbach devotes each chapter to a close reading of classic works in Western literature, with the aim of demonstrating how the chosen work relates to conventions of realism relevant to its time and place in history. He begins with a comparison between Homer's Odyssey and an Old Testament passage where God calls to Abraham, and argues that between the two, they depict two basic types of realism: "a fully externalized description" and "multiplicity of meanings and the need for interpretation," respectively (24). The *Odyssey* depicts reality through seemingly objective description, whereas the Old Testament functions more through psychological perspectives, describing in part how reality can be perceived. Auerbach's comments make it clear he prefers the latter, as it caters more toward the subjective version of mimesis. Future chapters range the whole of Western history: the continuous, pictorial history of the Romans; the figurative, fragmented history of early Christianity; the social prescriptions of Chrétien de Troyes' Yvain; Rabelais' *Pantagruel*, and the ordinary being melded with the fantastic; and the culmination of psychological realism in Virginia Woolf's To The Lighthouse, which is marked by the fragmentation of exterior action, the reflection of consciousness, and the stratification of time

(552-3). While Auerbach's choice of texts is self-professedly eccentric, his conclusion based on centuries of mimesis is that all differences between societies and peoples are being effaced, and we are approaching "a common life of mankind on earth," which is most visible in the culmination of realism, "in the unprejudiced, precise, interior and exterior representation of the random moment in the lives of different people" as represented in modernist realism (552). At first glance, a view of videogame history that emphasizes graphical realism may seem to have little overlap with Auerbach and his observations on literary mimesis, but the two share much in common. Both views interpret the past as a series of failed attempts to reach the current point of realism, rather than a series of valid interpretations in their own right. Both view their current moment as a new pinnacle of realism. And both maintain that the goal of an "unprejudiced, precise... representation" is neither possible nor desired; refinement is always possible.

This brief survey of literary theory is obviously not an exhaustive history of mimesis in Western literature, but it should suffice to illustrate that the various definitions and versions of mimesis constitute their own variantology, their own system of variants where some strands have gained more traction than others. Plato rejected mimesis, and by consequence, all representation, as an inferior copy of truth and reality; Aristotle rejoined with the argument that mimesis is imitation, and that representations can offer positive models for emulation. Potolsky identifies three main trends in mimesis that subsequently followed. Mimesis as imitation emphasizes formalism, following existing structures and methodology. Mimesis as performance marks how representation can seemingly designate a reality apart from the "real" one, and centres concerns—such as Rousseau's—regarding forgetting the real in favour of

imitation. Mimesis as realism foregrounds centuries of development in literature and the arts, whether it is, as Auerbach cites, the narrator telling about Odysseus' scars or an unidentified text informing us about Mrs. Ramsey's stocking. The next task, then, is to more directly relate these interpretations, especially mimesis as realism, to videogames.

Mimesis and the Videogame

Such a history of mimesis, from Plato to Auerbach, will be familiar to anyone reasonably well-versed in the history and content of literary studies. But as I hope some of the commentary on mimesis and games has illustrated, applying that history to videogames is not a simple matter. By their nature—or rather, by the cultural and technological associations by which they are bound, videogames add new wrinkles to the concept of mimesis, one of which goes by the name of fun. Because of their long association with toys, triviality, and play, it is often not enough for videogames to accurately represent the real world; they must be engaging and entertaining as well, goals that do not always mesh with accuracy (to be fair, the same could be said about realism in other media, though perhaps not to the same degree). While it never received an official release, the now cult-favorite "Desert Bus," a mini-game in the 1995 *Penn & Teller's Smoke and Mirrors*, satirically illustrates the gap that can rise between accurate representation and fun in game design. Game journalist Simon Parkin describes the game's banality:

players must complete that journey in real time. Finishing a single leg of the trip requires considerable stamina and concentration in the face of arch boredom: the vehicle constantly lists to the right, so players cannot take their hands off the virtual wheel; swerving from the road will cause the bus's engine to stall, forcing the player to be towed back to the beginning. The game cannot be paused. The bus carries no virtual passengers to add human interest, and there is no traffic to negotiate. The only scenery is the odd sand-pocked rock or road sign. Players earn a single point for each eight-hour trip completed between the two cities.

"Desert Bus" is a faithful recreation of the experience of driving a slow-moving vehicle, and, by Parkin's account, a faithful recreation of the boredom that driving inspires. In other words, it is mimetic to a high degree, but as a direct consequence, a fairly poor videogame—"The Very Worst Video Game Ever Created," if the title of Parkin's article is to be believed. As with "Desert Bus," so it is with videogames in general; there is a sense that they must not only be faithful representations, but entertaining faithful representations.

Of course, videogames are hardly the only medium that must be entertaining in order to be commercially viable. Video footage may constitute an extremely accurate depiction—and indeed, if that footage is from a security camera, it is often taken as reality, a record of what actually happened. But unless that footage is particularly stimulating or exciting, it is unlikely to appear in theatres everywhere. Likewise, while autobiographical and historical written works are expected to have some level of verisimilitude that makes them accurate representations of events, an average fantasy novel will not be a representation of the world as it is. To go back to Auerbach's *Mimesis*, my objection to the text is that Auerbach presents this history as an almost inevitable progression, a constant refinement of mimesis that culminates in its pinnacle in the modernist age. Instead, I would argue, the value of *Mimesis* is in the way Auerbach demonstrates how different conceptions and forms of mimesis held sway at different points in European and Christian-Judeo-history. As befits a variantological approach, these conceptions can be usefully considered not as stepping stones moving towards the modern state, but modes that exist together, as a variety of techniques that supply different brushes of realism to different points of time and media. For example, in film, a camera held at shoulderheight and in a jerky manner represents a scene as "authentically" seen by a single observer,

and this technique is employed in films as diverse as *The Blair Witch Project* and Aaonofsky's *The Wrestler*. In contemporary fantasy literature, grim and gritty characters and events are accepted as "more real" than Tolkien's high fantasy; the best known example is undoubtedly George R. R. Martin's *A Song of Ice and Fire* series, but similar tropes exist in R. Scott Bakker's *The Second Apocalypse*, Joe Abercrombie's *The First Law* trilogy, and even earlier, in Stephen R. Donaldson's *The Chronicles of Thomas Covenant*, the first volume of which was published in 1977. In these cases, mimetic realism intermingles with imitative mimesis, and techniques meant to approximate real life become rules for other works to follow. Rather than adhering to a pure notion of mimesis, different media have created different conventions for signifying realism.³⁵

It should be no surprise, then, that just that there is no single form of mimesis in other media, there is no single form of mimesis in videogames. It is the major contention of this dissertation that a dominant form is graphical realism, often at the explicit or implicit denigration of textual depiction. And the argument of this chapter is that, in the 1990s, buffeted by breakthroughs in mass market technology, graphical realism seized control as the driving force of the game industry, and arguably is still the driving force today. However, it is rarely the sole type of mimesis employed in videogames, and it is necessary to briefly consider other common forms in order to recognize how they assist or alleviate graphical excess. To that end, functional mimesis, mimetic controls, and simulation prove to be useful concepts.

In Geoff King and Tanya Krzywinska's book, Tomb Raiders and Space Invaders: Video

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Alexander Galloway's discussion of realism starts with this distinction, the difference between "realisticness," the "naive and unmediated or reflective conception of aesthetic construction" and social realism, defining realist games as "those games that reflect critically in the minutiae of everyday life, replete as it is with struggle, personal drama, and injustice" (74-5).

Game Forms and Contexts, the authors devote a third of a chapter to a discussion of realism. They agree that the general trend is towards graphical realism, that "the history of videogames is one that has been dominated, on one level, by investments in increasing realism, at the level of graphical representation and allied effects" and that "it remains true that the promise of improved qualities of sound and visuals – and especially the latter – has been a major component in the engine that has driven forward developments in game platforms; probably the single most important – or at least, most prominent – factor" (125-126). But they also argue that this realism is not complete, and, in fact, players have come to expect and accept such gaps, such as in the visual difference between pre-rendered cut-scenes and in-game action, or the way a sports game tends to emulate not the way that game would unfold in real life, but the way the game unfolds on television (135-6), a rather specific type of mimesis by imitation of previous mediums, or remediation.

Rather than relying fully on the inconsistent measures of graphical realism, then, they also propose a functional realism, "founded on the attempt to model actions and reactions (as well as representational surfaces) in a manner that corresponds to some extent with their real world (or other media) equivalents" (4). A common touch-point for this concept is how guns function in FPS games based on real wars, such as *Medal of Honor: Allied Assault;* for their part, King and Krzywinska demonstrate how functional realism affects everything from which weapons are appropriate for long-distance combat to an individual weapon's recoil (145). ³⁶ In

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For a related discussion, see "What games teach us about guns vs real guns," in which the author, Bill Coberly, argues that the simplification of guns in videogames—essentially, their functional realism is compromised in the name of making the game accessible and easier for the players—fails to teach players proper respect for operating firearms, an issue he thinks is crucial for a discussion of the effects of violence in videogames: "By making guns in videogames a sterile and similar experience across all types of guns and situations, we are fostering an uncritical audience unprepared for nuanced discussions of sociopolitical issues surrounding firearms and military action."

a text-based game, or interactive fiction, functional realism would include the simple expectation that objects introduced in the descriptions (the initial situation or replies, to use Montfort's terminology) would be accessible to the player. That is, if the game states that there is a phone in the room, the player would expect to be able to use it to make phone calls. Likewise, in a more graphic-based game, if the player sees a phone lying on a nightstand, under functional realism, that phone would function within the gameworld like a real phone. While functional realism is distinguishable from graphical realism, it is also connected to it; if a representation is graphically similar to the real world, the player will expect that representation to function as its real world equivalent as well. In the 90s, functional realism was not so closely associated with graphical realism, as it was still a relative novelty to have a high level of graphical realism at all, but as audiences became more used to a certain level of graphical realism, functional realism consequently became more of a selling feature.

Closely related to functional realism is mimetic interface, the notion that the input/output devices the players control should be similar to their in-game equivalents. The Nintendo Wii is perhaps the gold standard for a controller that functions through a mimetic interface, performing as a wand, a bow, a gun, or any of a number other devices in the gameworld. Whereas a regular controller would have a player hold down a button to swing a golf club, on the Wii, you swing the Wiimote itself. The Microsoft Kinect and PlayStation Move take the control a step further, eliminating the controller altogether—in *Kinect Adventure*'s "River Rush," for example, when the player jumps, so does the player-character. Nor did mimetic interfaces start with this generation of consoles; they have long been a feature of arcade games, where the hardware for a given cabinet is often designed especially for the

game in question. It is common for racing arcade games to have everything from a steering wheel to a gas pedal to a full cockpit included in the arcade unit, and *Dance Dance Revolution*, which features players dancing at the same time as their player-characters by activating buttons on the ground with their feet, was first released in 1998, long before the Wii's debut.³⁷ Like other forms of realism, it appears the more players are granted in terms of a mimetic interface, the more they expect. Gregersen and Grodal argue, in relation to *Wii Tennis*, that when players swing a remote rather than push a button, there is more commonly a disorientation from having to distinguish between physical space and the space depicted on the screen (a confusion of performative mimesis, similar to the difference between the space of the stage and the "real" world, discussed earlier), as well as disorientation caused by the Wiimote not responding as a tennis racket would upon impact—an "incongruit motor realism," as they call it, a disorientation that does not arise when just pressing a button (76). Because the Wiimote inspires greater confidence in a mimetic interface, greater fidelity is expected.

Finally, one of the yardsticks of game sophistication is the accuracy of its simulation, how well it models real-world events. Simulation is such a central term in game studies that some definitions of games define them *as* simulations. Gonzalo Frasca takes such a tact, and uses that definition to contrast narrative: "Unlike narrative, which is constituted by a fixed series of actions and descriptions, videogames need the active participation of the user not just for interpretational matters, but also for accessing its content. Narrative is based on semiotic representation, while videogames also rely on simulation, understood as the modelling of a

In general, games that revolve around music performance seem to be common fits for mimetic interfaces; see *Guitar Hero*, *Rock Band*, and even the bongos of the Gamecube rhythm game *Donkey Konga*. These interfaces show the limits of imitative realism, blurring the line between playing an instrument and playing a facsimile of an instrument.

dynamic system through another system"; it is, he says, the difference between providing behaviour over providing description or a representation of events (86). In comparison with the types of mimesis discussed thus far, this comparison sets videogames as a step above literary mimesis, as it can incorporate it, but also go beyond it, thanks to the demand for "active participation." Simulation can touch on graphical realism, in that part of modelling a dynamic system usually includes depicting it visually. As well, it overlaps with functional realism, the difference being that functional realism generally refers to individual elements of a game, whereas simulation claims the game as a whole.

There are limitations to defining games as simulations. Even with Frasca's statement that a simulation requires active participation on the part of the user, a focus on the modelling of a system places attention on how the game models some real life system, and potentially occludes the relationship between the player and the game, and the game and larger cultural contexts. Indeed, working from the other side of the argument, Rufat and Minassian criticize the idea that games are simulations on the grounds that such a definition belies how games make poor models, when accuracy and fidelity are often sacrificed in order to provide the player with an engaging experience. Furthermore, the average game is far more restrictive in terms of what it allows the player to modify in the simulation, whereas a proper model would allow more input (par 47). Just as graphical realism in games places attention in one area at the potential expense of others, so does thinking of games purely as simulations.³⁸

Mimesis in literature has taken many forms, and now mimesis in games takes many

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To Frasca's credit, he argues that, contrary to common use, a simulation need not model something that exists, that "Just as the word 'unicorn' lacks a real referent. *Mario Brothers* simulates an imaginary dynamic system (the Mario world)" (93). This approach brings simulation more in line with Kendall Walton's concepts, which will be addressed in the next chapter.

forms as well. Often, these forms are not mutually exclusive, and imply the presence of the others. If a game has a high level of graphical realism, then some level of simulation, mimetic interface, or functional mimesis often follow—as long as technology permits. With that, we may turn to *Myst*, to investigate what sort of mimesis the technology of the 1990s PC could afford.

The Image of a Book: Myst and Realism

Myst is a game that was immensely popular during its initial release, and, in comparison to its immediate predecessors, immensely powerful in terms of how it utilized CD technology in a way that much of its mass audience had never seen before. In terms of the actual puzzles and design, it did not really invoke anything that has not been used before, but it relies on its technology to set it apart, framing the world it depicted as real, and capitalizing on that depiction with its interfaceless interface. Picking up on the way Myst frames itself as real, Bolter and Grusin adopt the game as one of their chief examples of remediation, arguing that it demonstrates the way that computer graphics and videogames posit themselves as superior media over the older medium of the book. However, such a view does not entirely address the complexity of Myst's representations, the way the game situates imitation-based mimetic forms and the way it both utilizes text and positions the composition of text as an act of authorship and creation. Contrary to the narrative of graphical realism that Myst, on first glance, seems to support, the text of the game plays a crucial role in determining how the player is to respond to its graphic-based world.

Myst's legacy in games is an extremely unusual one. It was originally released for the Macintosh computer in September 1993 by Cyan, the game studio founded by brothers Rand and Robyn Miller, with the Windows version soon to follow. The game went on to receive extremely high acclaim from both mainstream press and game journalists during its debut and long after. A 1994 New York Times article emphasized it as a new technology that pushes film into obsolescence, stating that "in its combination of surreal futurism and old-fashioned imagery, [it] seems to move beyond cinema. ... 'Myst' seems to define a new genre in which

the film does not exist without the player who brings it to life" (Rothstein). A late 1999 review of the original Mac version says that "You won't find graphics, animation and sound better than this in any game" (with, the reviewer adds, the exception of the sequel *Riven*) and proceeds to give the six year old game a 5/5 (Unland). In addition to the critical praise, it also enjoyed widespread commercial appeal, selling 6.3 million copies worldwide, making it the best-selling PC game of all time until it was overtaken by Electronic Arts' *The Sims* in 2002 (Walker). By critical and popular measure, then, the game was a great success, and a success that seemed to result from the way its technology allowed it to "move beyond cinema" into some sort of "life."

It would be logical to assume that such a large success would have secured *Myst*'s place as a crucial game in game history, and indeed, it is still remembered fondly by many gamers. But in terms of game design, its obvious descendants are relatively few. Mark J. P. Wolf, in a book on *Myst* and its sequel *Riven*, details the most plain connection, other similar adventure games, but most are imitators from the mid to late 90s that never gained large followings of their own (109-110). In her article prompted by the 20th anniversary of *Myst*, game journalist Emily Yoshida speculates on why *Myst*'s influence seems to have sputtered out. In part, she says, it was because developers were simply not paying attention, that "Developers in 1993 were busy trying to perfect the illusion of three dimensions in 16-bit driving games, not figure out to subvert gaming itself"; in short, designers at the time were more interested in equaling *Myst*'s graphical achievements than examining its gameplay. Yoshida's choice of "subversive" here to describe *Myst* is not incidental; she questions if *Myst* was not just a game ahead of its time, but "Maybe it wasn't even really a game," that *Myst*'s appeal is precisely how atypical a

game it is in terms of its simplicity to navigate a user-friendly design. To that end, she points to how easy the game was for someone unfamiliar with gaming to navigate, thanks to its simple point-and-click travel and a focus on exploration and world-building over complex narratives or gameplay involving intricate hand-eye coordination.³⁹ By such a description, *Myst* shares a lot in common with the intent if not the implementation of mimetic interface, in that it aims to make a game as simple as possible for the user to control.

Myst, then, is something of a paradox: it is a canonical game in terms of its place in game history, but a variant without clear descendants in terms of its design. What it does have in common with the games of its era, I would argue, is in its reliance on graphical realism to create that sense of exploration and simplicity that Yoshida identifies. The emphasis on such realism begins in the game's first scene. Upon loading the game for the first time, the player is treated to a series of CGI animations, as the game's various associated logos present themselves. This series of images is followed by a short cinematic of the silhouette of a man falling through a fissure in a starry void, followed by the appearance of a small leather-bound book, and the pages of the book opening (upon a click) to reveal an animated picture of an overhead view of an island. Once the player clicks on the picture, she is transported to the island-world of Myst. Before the start of the game proper, the player has been subjected to a parade of images demonstrating what, at the time, could be considered cutting edge in terms of computer graphic animation.

But this animation is not free from text; quite the contrary, the opening sequence is

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³⁹ Yoshida's claim that *Myst* left no legacy is not a universal opinion; Robert Yang's "A People's History of the FPS" series argues that *Myst* is part of a line of first-person view games that offer nonviolent engagement, a line that continued to the present largely in the form of mods. Without rejecting Yang's argument, however, Yoshida's point still holds that in terms of commercial success and the general public's awareness, *Myst* has no obvious descendants beyond its own rafter of sequels.

cluttered with instances of text, and with text functioning as images. The very first images presented are stylized versions of the company and game name ("CYAN" and "MYST"), and continue through the game's credits that play along the opening cinematics. The text has to share perceptual space not just with the other visuals, but with a narrative voice-over that later is revealed to be the mysterious Atrus, who speaks about the book's disappearance but not destruction, concluding with a sentiment that again emphasizes text: "The ending has not yet been written." It is only after Atrus finishes speaking that the player is faced with the ultimate signifier of text in western culture, a book, and the game ceases until she clicks to open it, to discover that the book is not filled with words, but a moving image. The final movement of the game's opening sequence is to focus on what would normally be a collection of text, replaced with a moving image.

This opening scene is metonymic for the game as a whole: as in the introduction, the emphasis is always on the graphics, and through virtue of those graphics, *Myst* makes the implicit claim that the events it depicts are real. Those discussing *Myst* often draw similar connections: Wolf's book on *Myst*, for example, emphasizes the connection between its graphics and its sense of realism, by defining its primary attractions as exploration, gameworld, and technology, and tying these traits together with its graphics. In particular, he argues that the defining feature of the adventure game genre is that it emphasizes "the game's world and the player's use and experience of it," so that the world itself becomes the player's antagonist (7-8). "Exploration, navigation, and areas to which access is initially withheld" are the adventure game's defining features (8). For *Myst* in particular, this exploration is chiefly an exploration of graphics, "the play of light, shadow, and texture, despite the constraints imposed by 8-bit

colors and dithering" (4). The slow and generally static nature of these images promotes contemplation, Wolf argues, and the more than 2500 screens' worth of imagery gives it variety. This massive collection of images was possible because of its CD-ROM technology—in fact, Wolf goes so far as to claim that *Myst*'s graphics was for some people one of the main reasons to buy a computer with a CD-ROM drive to begin with (5). Further, like Yoshida, Wolf identifies *Myst*'s easy accessibility and lowered price (at least in the later portions of its existence) as points that contributed to its success. Following the three circuit-model, technology, economy, and culture come together in the popularity of *Myst*'s graphical world.

Myst expends a great deal of effort in establishing for the player that its gameworld is "real." Wolf notes that this claim is even entrenched in the instruction manual: "In [the manual section] 'A Message from Cyan,' we are told that Myst is an 'alternate reality,' that it has 'the most depth, detail and reality that you've ever experienced in a game,' and that "Myst is real" (36). This emphasis continues in the fully 3D version of Myst released in 2000, called, appropriately enough, realMyst—implying that the by-then dated technology of the original makes it less real than this version, and that a fully 3D version of the game was always the more authentic interpretation. Myst's claim of graphical realism rests primarily on its so-called an interfaceless interface; that is, the game's first person perspective is completely bereft of extra windows, gauges, and (usually text) status indicators that other games possess, in order to give weight to its effort to distance itself from such game-like elements. While the interfaceless interface is a common ideal in first-person videogames, Myst takes that tendency to extreme by sharply deviating from the traditional 2D, third-person perspective of the adventure game genre.

It is important to realize, however, that *Myst's* rejection of the traditional game-like elements of the adventure game genre is sometimes only graphic deep, that the realism it aspires to is graphic-based, and may not extend to other forms of realism, such as functional realism; the game still uses, for example, the limited inventory system more common to adventure games than to catering to a sense of realism. In *Myst*, the PC is incapable of holding more than one prison page at one time. As a consequence, every island must be visited twice if the player is to get all the pages. This limitation is clearly not a diegetic one, as nothing in the game indicates that the player-character is incapable of clutching two pages at once. Rather, such artificial limitation is common in adventure games of the era, forcing the player to double back and retrieve items in order to artificially inflate game length. While *Myst's* graphical realism may appear to be reaching towards a simulation-based version of mimesis that models "real world" behaviour, its limited inventory system belies its history, harkening through imitative mimesis back to older patterns of adventure game design.

Myst also invokes this imitative mimesis into its puzzle design, drawing on resemblance to give the player hints on how to progress, and link together her exploration of the game's islands. At one point of the game, the player winds up in a stationary rocket ship. But the rocketship that goes nowhere contains a representation of a book that functions as other books do—or at least, as other books in Myst do, as a conduit between Ages. Though the rocketship itself does not go anywhere, its presence suggests to the player that some form of transportation will occur here, if she can figure out how to get inside and solve the puzzle, and the transporting power of the book fulfils the promise the ship itself implies. The game is replete with such orienting resemblances: a map of Myst in the library is actually the controls

for changing the position of the rotating tower to face each of the island's major areas, providing clues about that associated area; a simulation of a marker switch in the holograph room is meant to push players towards the game's first puzzle; manipulating tiny scale versions of the ship and the giant gear on the island in areas far from them mean manipulating the objects themselves.

The repeated association between representations presents the player with a template that can be built on for more complicated puzzles. For example, the player may have noticed that one of the buildings on the island is a planetarium, with a viewing station that contains thousands of constellations, each viewable once she manipulates the sliders to the appropriate date. If the player has also figured out how to manipulate the library map so that the rotating tower faces the sunken ship, then she has had the chance to go to the tower and retrieve coordinates that correspond to dates on the planetarium viewer. These dates, in turn, present a series of constellations. The constellations correspond to objects drawn in one of the journals, such as an arrow or an hourglass. It is then up to the player to realize that these dates, inputted into the planetarium, give the sequence that a series of buttons with those objects on them must be pushed in order to raise the model ship out of a small fountain (and the larger ship, by proxy). Throughout the puzzle then, the player comes into contact with four different representations of stars: the projected planetarium images, the dates provided in the rotating tower, the journal drawings, and the buttons—and all without ever seeing the actual (or rather, actually diegetic) constellations in the Myst Island sky. Myst may be best known for its graphical realism, but the actual puzzles depend on the player realizing that the game features a circulation of imitations that connect to each other, but never connect back to an original

referent—it is mimetic resemblances all the way down.

Myst and the Book

Many of these resemblances, as should be clear from the list above, are based in text, but in Myst, the connection between text and book is somewhat ruptured; books exist, but, as in the introduction, presenting concepts in text form is no longer their main purpose. The conceit of Myst is that a man named Atrus discovered a way to create links between worlds, perhaps even create worlds, through writing in a series of books, with each book being a portal to another world. In time, he entrusted stewardship of one world, Myst, to his sons Achenar and Sirrus. What happens next is deliberately obscured, but by the time the player starts the game, Atrus has disappeared, and both his sons have been imprisoned in books in Myst's library, each accusing the other of being responsible for their respective wrongful imprisonments. Slowly, the player travels from Myst Island to other time periods accessed by books, and retrieves the pages consisting of the brothers' prisons; only when their respective book is complete once more can they escape. In a final plot swerve, in order to reach the game's best ending (or at least, the one that does not end in the player's eternal imprisonment), the player must find a third book and free Atrus from his own book prison. But despite the number of books and pages the player must track down, none of the books mentioned here contain text. Rather, each of the conduit books (those that link to a world the player can traverse) and the prison books (those that contain a member of Atrus clan) contains a video, and for the prison books, as the player adds pages, the static in the video decreases and the clarity increases, as if adding pages boosts a signal. In Myst, books—at least, these books--function as direct conduits to reality, but they do not use text to do so.

In Remediation, Jay David Bolter and Richard Grusin address what they believe is the

point of *Myst*'s video-containing books. In the course of their study of remediation, they refer to both *DOOM* and *Myst* in tandem repeatedly (42, 47, 48), but they devote special attention to *Myst*, precisely because of how it uses books. After summarizing the plot of the game, they present their interpretation of its message at length:

The allegory is obvious: the book as a text should be replaced by the book as a window onto a visually realized world. Books operate best (or as best they can) under the logic of immediacy, but computer graphics are more immediate and therefore better. If the player wins by helping the father destroy the brothers' books, she transcends the book as a texture of symbols and is allowed to remain in the world of computer graphics. If she fails, she is trapped forever in the book itself—the worst possible fate in the age of graphics. In the course of playing, what the Myst player is actually discovering are the moments and strategies in which the computer game remediates the printed book (96).

Any reader reaching this point in Bolter and Grusin's book would not be particularly surprised at this assessment; it is an almost necessary conclusion of their theory of remediation, that new media forms position themselves first and foremost by asserting their superiority over older forms. Indeed, such an interpretation fits with the graphical realism form of mimesis that *Myst* champions. The problem with such an interpretation is that it ignores two other mimetic sources in the game: the proliferation of non-verbal representations, and the many books that are neither conduits nor prisons. I have discussed both of these elements already, but to see how they function alongside the books Bolter and Grusin identify, it is worth discussing in detail a game location where all three come together, in Atrus' library on Myst Island.

The library is housed in a building with vaguely Greco-Roman pillars, and it barely

deserves the name library; it houses three shelves of books, mostly destroyed, as well as Sirrus' and Achenar's prison books. But in addition to the books, there are three other immediately accessible representations, 40 each of which must be mastered (mastered being perhaps an overstatement) to further the game. First, there is the map on the wall, which automatically fills as the player explores the island; the player must realize that pressing a particular spot on the map triggers the rotation of a nearby tower, and that the structure the tower is facing on the map represents that the tower has been aligned in such a way that the writing revealed when pointing to that spot relates to information regarding that spot. For example, as mentioned earlier, when the tower points to the planetarium, it reveals celestial coordinates needed for another puzzle; when pointed at the rocket ship, it reveals the wattage necessary to unlock its door. Realizing that the map is both a mimetic representation of the Myst Island and an object that controls other objects on the island is a rather complex puzzle to solve; consequently, the other two representations in the room serve, in part, to introduce this connection. On one wall of the library is a framed picture of a set of stairs leading to a passageway; on the other is a framed picture of the entrance the PC just entered. Clicking on the former, the PC will quickly realize it too is not just a painting, but a button, as pressing it causes the bookshelf to fold into stairs, and a hidden passageway to the rotating tower to open. It also causes the entrance to the library to close, and the only way to open it again is to interact with the second framed picture (which, in turn, causes the passage to close and the stairs to revert to their original, readable state). Incidentally, the transformation of the bookshelf into steps furthers the association between books and transportation, established as I mentioned by the conduit books placed in

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The fireplace puzzle, leading to Atreus' book and the final prison pages, could be considered validly a fourth, but it isn't accessible until the player has explored all the other Ages and retrieved their prison pages.

the rocket ship and the stoneship. More importantly, the two picture-buttons accustom the player to manipulating the world of the game through its representations, a way of thinking absolutely necessary to further the game.

At some point in the game, however, the player will eventually have to return to the bookshelf and treat it as a repository of knowledge, not merely something to be tread on. Though most of the books in it have been destroyed, some of Atrus' journals remain. These books are not just window-dressing; they contain diagrams and codes necessary for the PC to progress in other stages of the game. But they also form the backbone of the game's story, as they contain Atrus' descriptions of his work in creating the various ages of Myst through the production of the books he writes. The journals also make it clear that the Ages have an existence independent from Atrus, and determined by more than just their author's will: Atrus describes how a bucolic Age transforms itself into something barren and stark after it surprises him with an impromptu earthquake; at another point, he attempts to write a ship into existence, only to have it immediately go out of his control and crash upon the rocks. Even the journals in which Atrus recounts his world-building are somewhat beyond his control, as in one passage, he recalls how the natives played a prank on him by giving him ink that changed colours over time, and, in a more troubling event, one journal started erasing passages that he had written. In Myst, the author is a world-creator, but even the smallest elements of creation can be beyond their creator's control. Rather than depicting books' immediacy as inferior to computer graphics, the text in the journal both provides necessary context for the game and the basis for an argument that composing books is an act of creation—as is reading them, since it is through these books that the player comes to understand how *Myst*'s gameworld came into being.

Further, the journals illustrate the perils of pushing the connection between authorship and control too far. Atrus (at least at the point when he composed the journals) clearly regards the worlds as his to exploit; in the same journal as the ship, he comments that "I think of it [sic] this age as a gift that I will wrap up and open some day in the future, only to discover that it has changed so much that indeed it is a surprise." In a similar fashion, when he returns to the age with the great natural cataclysm, he declares that he can still find a beauty in the barren landscape just before he starts contemplating the tools he will need to extract its mineral deposits. Though he may not entirely control the world of *Myst*, Atrus still feels, prior to his imprisonment, that as its author, he is entitled to reap its benefits. Shortly before the game's end, Atrus tells the PC (player-character) how his sons, in his absence, ruined Myst Island, precisely because they too felt they were entitled to rule it by virtue of possessing the power to write its history and manage its books. It is only when this aural history is interpreted in tandem with Atrus' journals that the PC sees how powerful authorship can be, and how even for the game's father-creator figure, it holds the potential for exploitation.

Bolter and Grusin maintain that, through remediation, *Myst* argues that the book should be replaced by the game, that "computer graphics are more immediate and therefore better" (96).) It certainly cannot be denied that *Myst* made its graphics and relatively advanced technology its immediate selling point. But both text and the representation of text, in the way the game uses books, are an essential part of the gameworld. To name another "obvious" allegory in *Myst*, the game equates world building with book writing—it also implicitly links game design with world building, a link that is further supported by the fact that *Myst*'s main designers Rand and Robyn Miller also played the characters of Atrus, Sirrus, and Achenar. The

role of the book does not necessarily imply that it is meant to be understood as inferior to the computer game, but that the two are equally worlds that have been created. Much of the story of *Myst* is never rendered visually in its empty islands; rather, it appears on the small bookshelf in Atrus' library. While the Millers may have promoted the graphics rather than the writing, the latter supports the former in creating the overall gameworld and the player's overall interpretation of it.

Much of *Myst*'s success can be attributed to the moment in history in which it was released. Thanks to improvements in technology, the personal computer hit critical penetration in North America, bolstered in part by the addition of a CD-ROM. *Myst*, with its video sequences and computer-generated animations, was in the perfect position to demonstrate what affordances that new technology had to offer. Further, its so-called interfaceless interface and its slow pace made it ideal for those unaccustomed to videogames in a way that its contemporaries were not. The Miller brothers saw the advantages of the digital form and incorporated it into the world-building plot—not necessarily, as Bolter and Grusin argue, to denigrate the media forms that came before it historically, but to illustrate how various media—books and games, but also planetariums and little model ships—create and interpret the way we understand the world.

Myst, DOOM, and the Technological Dependence of Graphic-based Realism

At the risk of severe understatement, *DOOM*, as a game, is very different from Myst. My playing notes can attest to as much: whereas the notes for *Myst* are filled with puzzle diagrams, maze outlines, and the transcriptions of Atrus' journals, the notes for *DOOM* are short and tense, with statements punctuated with exclamation marks cursing the frequency of death and detailed descriptions of the skulls and torsos littering the backgrounds. Myst is a slow game, designed to offer players a chance to contemplate and piece together its story and the puzzles at hand. DOOM is about speed and action, demanding that its puzzles, such as they are, be either solved on the run or after everything else in the immediate vicinity is gunned down and dead. Further, there is a difference in audience that arises directly out of the difference in design: Myst's undemanding pace and simplicity of control led to it being championed by its designers and by the press as the perfect game for someone who had never played one before; DOOM's constant action and emphasis on speed require a level of mastery and aggression that essentially gave rise to the modern conception of the hardcore player. In terms of influence on future game design, DOOM is widely lauded as the game that started, or at the very popularized, the modern First Person Shooter (hereafter abbreviated as FPS), whereas, as Yoshida previously stated, *Myst* is often viewed as a game without descendants. Finally, in terms of story and text, Myst's story goes on for pages and pages inside the game and out; DOOM's story unfolds in a single screen of text per episode, informing the player exactly where the next demon-killing arena is located, be it Phobos, Mars, or Hell itself. In fact, as an indication of the value *DOOM*'s designers placed on story, one of its designers, John Carmack, once famously quipped, "Story in a game is like a story in a porn movie; it's

expected to be there, but it's not important" (Kushner 105).

But in spite—or perhaps because—of that difference, *DOOM* and *Myst* are frequently associated with each other, in academia and other accounts. In the Landmark Videogame book series with University of Michigan Press, *Myst* and *DOOM* are, out of all possible videogames and videogame series, the first and third game objects under study, respectively. In Robert Yang's "A People's History of the FPS" blog post series, his post on *DOOM* begins with an outline of *Myst*. In Bolter and Grusin's aforementioned book, in the twelve times *DOOM* is mentioned, *Myst* is always mentioned in the same sentence. The root of this odd couple pairing is an acknowledgement, whether explicitly stated or not, that *DOOM* and *Myst* share much in common. Despite the difference in playing styles, audience, and storytelling sensibilities, there is a core similarity in the way both games present their virtual worlds, in that both presentations depend on their respective technologies and encourage players to respond to their respective portrayals of graphical mimesis.

One argument concerning the similarity between *DOOM* and *Myst* states that, were it not for one thing they share in common, they would have more in common yet. Andrew Hutchison pursues this somewhat paradoxical thesis in his essay on game aesthetics and their link to technology. More specifically, he argues that the games' respective design differences arise directly because of the technological limitations of the time. Their constant comparison is ironic, he claims, because if their respective design teams had their druthers, "*Doom* and *Myst* would have been audio-visually very, very similar indeed. ... If the technology of 1993 had been no limitation, both *Myst* and *Doom* would have had sensational cinema style, photo-real graphics and audio, with the additional feature of interactivity." According to Hutchison,

DOOM is pixelated and cartoonish because the id development team wanted speed over visual fidelity; *Myst* is slow and contemplative because the Miller brothers sacrificed options like free movement and immediate response in order to fit in video files and high quality photos.

Admittedly, Hutchison's argument is constructed within a very specific context: his larger thesis is that game scholars without a technological background have a tendency to attribute deliberateness to aesthetic elements that are determined by technological issues out of the designers' control. He certainly has a point; the nascent fields of platform studies and code studies are championed in part to address the shortcomings of digital scholars who focus on representation over software and hardware. There is a temptation particularly in researching older games to forget the historical context involved, available technology included.

The problem with this argument is that it risks overshadowing the actual differences in aesthetics between the respective studios. The Miller brothers reportedly were influenced by literary works such as Jules Verne's *The Mysterious Island*, and the game is obviously very concerned with the creative power of literature in its use of books as portals and containers for entire worlds (Carroll). The id team, who named among their influences films such as *Alien* and *Evil Dead II*, were in general prone to juvenile jokes and heavy metal-inspired carnage; nowhere is this more evident than the brief cutscene ending of episode three, where beatific pipes give way to a guitar riff as the screen pans from a pleasant meadow onto a burning city and a decapitated rabbit's head thrust onto a bloody spike (Kushner 101). To say that the two games would have been visually similar if only both sets of designers had access to more advanced technology is to belittle the contexts, influences, and creative visions of their creators. Further, the danger of Hutchison's argument is that, taken to extremes, it is an

argument of technological determinism, wherein superior audio-visual representation—and by implication, graphical realism, which is often used as short hand for the pinnacle of superior audio-visual representation—is taken to be the hallmark of superior game design. At times, Hutchison seems to be arguing as much: "Richer media *do* have the potential to actually carry more information, and therefore to convey more meaning for dramatic/narrative/immersive/gameplay effect." The relation between information and meaning is not so easily discerned however; a proliferation of information can confuse the interpretation of meaning, and games with lower media potential—the arcade games and text games of the 1980s, for example—were certainly meaningful for their own audiences.

In sum, despite being vastly different experiences, *DOOM* and *Myst* are both games that rose to massive popularity in the early 1990s, albeit to vastly different audiences. In terms of mimesis, the games enjoy reputations that appear to shun mimesis as imitation, creating new genres whole cloth—though in reality, Myst's puzzles have well-established precedents in the graphic and text adventure game genre, and *DOOM* has clear roots to 2D shooters, as well as the obvious connection with id's previous game *Wolfenstein 3D. Myst* and *DOOM* could justifiably claim to offer new game experiences through the graphical realism offered by their successful application of new technology. At the same time, these 3D games do not age particularly well visually (although *DOOM* and *Myst* are hardly the worst offenders on that front), and now appear dated despite appearing to be the epitome of real-world images in their day. That contemporary players dismiss these once "realistic" games as outdated demonstrates how pervasive the pull of mimetic realism is within the culture of videogames, and how closely intertwined this realism is to the technology of its time. Dismissing *DOOM* now because of its

dated graphics also illustrates the failings of graphical realism, in that the narrative it generates depends on constantly denigrating everything that has come before the current moment. As many can attest, the appeal of *DOOM* cannot be accounted for by the graphics alone, and that appeal lies, at least in part, in how its text positions the game's style.

First Person First Steps: Legacy of DOOM

Despite critical trends towards association, *DOOM* is worthy of consideration apart from Myst, for as much as they share in common, it is DOOM that has become the prototype for an entire generation of games, solidifying a genre known as the first person shooter. Everything from Mirror's Edge to Portal to Call of Duty could justifiably include DOOM as an antecedent. DOOM also had a number of paratextual elements that id carefully capitalized on for their success. Like their other previous games distributed by Apogee, DOOM was originally released as shareware, using the still fledgling Internet to release its first episode and the other two thirds of the game had to be unlocked by purchasing the full game. It is arguably this model that led the game to such thorough saturation; while the exact number differs between accounts, the sales estimates range from 1.8 million to 2.85 million, with some community sites claiming ten million installations of the shareware version in 1995 (Pinchbeck 4). DOOM's multiplayer mode was widely popular, leading to the focus on multiplayer in id's later game, Quake, making it an indirect origin for the nascent field of e-sports, professional game-playing competitions, despite the fact that DOOM's creators had added multiplayer support almost as afterthought, believing that "99 percent of all players would only ever do single-player" (Petersen, qtd. in Pinchbeck 131). John Carmack, drawing on what Kushner calls his "Hacker Ethic," made *DOOM*'s source code available to the public in a form easy to manipulate (or at least, easy in comparison to their previous game, Wolfenstein) (Kushner 166-7). This move further extended *DOOM*'s life cycle, as it became adopted by the hacker communities who made mods ranging from ones like D!Zone Gold which added literally thousands of levels to the game to Justin Fisher's Aliens TC, which reimagined the game as one set in Ridley Scott's film universe (Pinchbeck 123). Entirely apart from the main game itself, *DOOM* has a place in videogame history thanks to its economic model, multiplayer popularity, and mod community.

More generally, *DOOM* could be considered as the game that cemented the modern conception of the hard-core gamer, negative stereotypes included. As mentioned earlier, Sega, in its promotion of the Sega Genesis, attempted to appeal to teenaged gamers moving out of Nintendo's "kid" demographic through connecting coolness to its mascot character Sonic's speed; id pursued a similar sense of cool, but through speed, violence, and a culture of competition that drew on both. Consider this passage from Kushner's book-length study on id, wherein he describes Romero's adoption of a "rock star" persona as the public face of id, and his performance in the 1994 Doom deathmatch tournament in Austin, Texas with fellow id employee Shawn Green:

It was all silent except for the sounds of fingers rattling on keys. But all that changed as the id guys began to play.

Romero hurled a few shotgun blasts into an opponent and yelled, 'Eat that, fucker!'. The sheepish guy on the computer looked up in fear. Shawn knew that look—the look of a gamer never heard true, unbridled smack-talk, just like he'd been the first time he had heard Romero insult him during a game. But now Shawn was a pro and joined right in. "Suck it down, monkey fuck!" he called, after firing a few blasts from his BFG. The gamers cowered. They would learn. (174)

If the toxicity that surrounds communication in and about videogames can in any way be traced back to this Austin performance, there has been much learning indeed. While allowing for

Kusher's creative license, this account suggests that part of what Burrill calls the culture of "boyhood," a fantasy of masculinity in which manhood is won through videogame victory (2), arose with *DOOM*. And not only did that culture arise with it, but it was deliberately cultivated by its members in order to establish id as a brand, a force to be reckoned with in the game industry of the period. This, too, is part of the paratextual legacy of the game.

DOOM's place in the history of videogames and gaming is undeniable. But while the game is known for setting a new standard in 3D graphics, it is not devoid of text as it may seem at a glance. The interface is a hybrid work of text, in the many listed variables, and graphics, as in the character's portrait. Further, the text's form, in colour, font, placing, and size, all play a role in directing the player's attention. As much as the gothic caverns or stark military bases, DOOM's aggressive, adolescent tone is set by the menu text, from the level names to the difficulty settings and quitting prompts. Despite the demon-laden setting, DOOM's claim to graphical realism may stand better than Myst's, by virtue of the game pioneering the first person perspective for a relatively new audience. The first person perspective lends a sense of immediacy to the proceedings, and creates a connection between player and character very different from that of the 2D platform jumping of The Super Mario Bros.

The Text of DOOM

What is left, then, is the game itself, and a more thorough investigation of what it presents in terms of mimesis and image and text. As stated previously the id team was not interested in story. Beyond Carmack's pejorative reference to the role of story in videogame, the only team member that desired story elements in *DOOM* was Tom Hall, and that view was a "flashpoint" in the split that led to him leaving the company before the game was complete (Pinchbeck 20). But abandoning story does not mean id abandoned text. In fact, one could argue that text is more present in *DOOM* than it is in *Myst*; after all, it is built right into the interface, and every action the player takes in the game is filtered through it. Approximately four-fifths of *DOOM*'s visual real estate is devoted to its first person view. The bottom fifth of the screen is what is called the HUD—the head's up display that informs the player how the PC is doing⁴¹. While *Myst* attempted to create immersion through its "interfaceless interface," *DOOM* keeps its numbers and statistics on the surface.

From left to right, the game displays ammo amount for the equipped weapon; health; which of the six weapons is currently equipped; the PC's animated face; armour; which, if any, of the level's colour-coded keys the player-character is carrying; and the ammunition levels of all types, rather than just for the weapon currently equipped. Whenever the player picks up an item, a short notification pops up in the upper left corner of the screen; another notification helpfully pops up in the same place to let the player know what has killed the PC when that event occurs, whether "slashed by an imp," or "ripped open by a baron of hell." It is worth

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⁴¹ This description, and the rest of the section, describes play as experienced in *The Ultimate DOOM*, id's 1993 release for the PC. Versions released earlier or later, as well as versions released for consoles or other platforms, may be slightly different in minute yet significant ways, such as a re-arrangement of the HUD's display.

noting that, in-game, death is the only time at which the game informs the player the name of the monsters populating the gameworld, beyond calling them generic "demons"; tying naming with death in such an adversarial manner is one of the many ways the game reinforces that the primary purpose in the game is to kill or be killed.

This outline warrants deeper analysis. Even in the midst of what little text is displayed, the PC's portrait, an animated image, takes the center position. It is somewhat unusual for a first-person game to display its PC's face, especially in-action rather than in a pre-scripted cutscene; as such, given *DOOM*'s status as the proto-FPS, the information conveyed by the portrait take on special significance. *DOOM*'s PC is constantly in motion: he furtively glances left and right; grimaces when hit, in time to his grunt of pain;⁴² loses his pupils when invincible; and becomes increasingly bloodied the more his health is diminished. In this manner, the portrait plays a double role, reinforcing the information provided by the text surrounding it, but also providing the player with an image of the character she is inhabiting. In later games, much of this latter function happens precisely through cutscenes and pre-recorded speech. The technology available to id and their desire to limit the scope of the game's story make an animated portrait a useful substitute for evoking PC emotional responses.

Further, the fonts for all of these displays are colour-coded, to further distinguish the streams of information they supply to the player. Static headings are in a light-grey shade, which is slightly lighter than the background of the HUD itself, and approximately the same shade as the military complex of the first episode of *DOOM*, perhaps to associate the colour in

⁴² Such sounds are often used in *DOOM* to support information that has been provided visually; for example, a low tone is emitted, alongside the short yellow flash and text notice that occur whenever the player in *DOOM* picks up an item. Though it not the focus of this dissertation, sound is often employed in such a supporting role in game design.

the player's mind with the game's early settings, and to form a contrast with the later bright red of the levels based in Hell. The numbers corresponding to the weapons available for use as well as the remaining ammunition and the total ammunition the PC is capable of carrying is in yellow, which seems to indicate that these numbers are variable, but not immediately essential. The remaining information—health, current weapon ammunition, and armour—is displayed in large, red font, indicating again that they are variable, but that they also contain information currently crucial to how the player decides to act in the main screen. Correspondingly, notification of items comes in red font as well, whereas notification of player death is in yellow, suggesting perhaps that death in *DOOM* is not to be treated like a new item, as something the player can react to on-screen, but is, like current ammo levels ultimately only temporary, fixed through loading a previously saved game.

It is also the text that connects *DOOM*'s gameplay explicitly to Romero's aggressive style of play and sense of humour. The names of three episodes reinforce the overall gothic mood: "Knee-Deep in the Dead," "The Shores of Hell," and "Inferno," respectively. The names of the individual levels, on the other hand, take their lead from the game's graphics, which start out in orderly military grey before descending into the blood-soaked, skull-laden warrens of the later game: Episode One's "Hangar" and "Central Processing" give way to Episode Three's "Slough of Despair" and "House of Pain." Before even starting the game, the players are faced with choosing a difficulty level, and it is instructive that these choices have labels besides "hard," "medium," and "easy"; in ascending level of difficulty, they are labelled "I'm too young to die."; "Hey, not too rough."; "Hurt me plenty."; "ultra violence."; and, in font meant to depict a dripping, etched quality, "Nightmare!". Choosing the last option prompts a further

message: "Are you sure? This skill level isn't even remotely fair." The first two options are clearly valued to be lesser choices for a player who cannot handle the game "proper," and the second and third are coded in terms that make them appear masochistic, or even BDSM. The final two options, on the other hand, have no such obvious coding, a lack that suggests that playing *DOOM* on these levels of difficulty is the norm that players should adopt; the second prompt at the Nighmare! level suggests that the player who perseveres and dominates under the "unfair" standards set there are the true victors.

The text messages that pop up when the player attempts to quit are varied, but many are similarly coded. They range from the relatively innocuous "Don't leave yet--there's a demon around that corner" to the more aggressive "Ya know, next time you come in here I'm going to toast ya." and the down-right threatening "Just leave. When you come back, I'll be waiting with a bat." All of these messages match the aggressive, arguably juvenile, tone that Romero promoted as the norm in multiplayer matches. But perhaps the most interesting message, in terms of paratextual reference, is comparatively nonaggressive, and refers to another game series entirely: "You want to quit? Then thou hast lost an eighth!" This message refers to Richard Garriott's *Ultima IV*: Quest of the Avatar, which is often touted as one of the earliest games to explicitly call on its players to act in an ethical manner. "Thou hast lost an eighth!" was the warning that appeared when the player is at risk of losing a particular virtue through unethical acts, such as attacking a peaceful citizen, or cheating a blind merchant. In id's hands, it represents a very different concept of virtue, where the virtuous player is simply the one who keeps playing. It is a re-purposing that simultaneously serves contradictory purposes. It embraces the older PC tradition of slow, contemplative games and places DOOM in part of that tradition, by assuming its players are savvy enough to appreciate the reference. But at the same time, it rejects Garriott's attempt to create an ethical game, arguing that for a gamer, virtue is not being merciful or honest to NPCs—to a gamer, there is no greater virtue than to continue playing the game. These textual claims regarding violence and game culture, arguably more than any part of the game, tie in to the public image of id in game culture at large that Romero was trying to cultivate. But at the same time, they seem to utterly contradict the impulse of graphical mimesis, as they appear primarily when the player is outside of the gameworld proper. As a first step to addressing this textual opposition, I turn to the ways in which *DOOM* reinforced its graphical realism.

DOOM, the First Person View, and Graphical Realism

DOOM was promoted very explicitly by reviewers, developers, and publishers, as games that placed the player into a virtual world, placing it alongside a 20th century history of technological development: "For both Cloud [one of *DOOM*'s level designers] and Carmack, FPS games were rooted as much in the rhetoric of virtual reality as in the history of the arcades. For them, DOOM was about challenging the assumptions of virtual reality as proposed by the likes of Jaron Lanier or Howard Rheingold" (Pinchbeck 25). The arcade comparison will be fleshed out later, but at the moment, the relevant take-away is that even though DOOM was designed for entertainment and bloody violence, its creators also saw it as a participant in the ongoing technological drive towards virtual reality. One key element in doing so is the first person camera through which the players see the world. While not the first games to offer this perspective, the quality of experience meant that *DOOM* legitimized the perspective and proved the viability of a 3D world open for exploration. In *Game Spaces*, Michael Nitsche devotes a chapter to the videogame camera, noting that the obvious contrast is with film, but with one crucial difference: the camera in a 3D videogame allows entrance into architectural navigable space, and, consequently, "taught generations of players how to read 3D spaces. Players developed a much higher literacy of gameworlds" (95). Myst, for all its visual splendour, is not truly a 3D game, as players react only to static images. DOOM's visuals present a fully 3D world—albeit a 3D world inhabited by pixelated monsters.

Nitsche makes three further observations on the videogame camera, and on the firstperson camera in particular, that are relevant to understanding how image and text in *DOOM* function. First is the simple and powerful observation that "hero avatar control and control of the presentation are intertwined" (96). This truism holds for many, though not all, videogames. To take one example from hundreds, in *Super Mario Bros 3*, the camera follows the player-character as Mario edges towards the edges of the screen. While there are exceptions to this rule, they emphasize how the PC is deviating from the normal case; when Mario runs, the camera lags behind slightly, to emphasize his speed. In levels such as 1-4, where the camera continues relentlessly onward regardless of Mario's action, it creates a feeling of helpless desperation in comparison to other levels, as the player struggles to keep up. In other words, the player's sense of power in the game is directly connected to how the camera in-game responds (or does not respond) to her actions. In *DOOM*, as the prototype FPS, the player does not just control the movement of the camera, the player *is* the camera, in that the camera moves as the player does. It is precisely through this connection that the claim to virtual reality takes place: because the player can so directly control the presentation of the 3D world, he or she can lay claim to presence within that world. In *DOOM*, the graphics are always a direct response to the player's actions in the 3D world.

Nitsche's second point is more specific to first-person perspectives, in which he compares their progression to the "last girl" in a horror movie, who shifts from a position of victim to avenger:

In games that rely entirely on a first-perspective we might read a shift of the player-character, often from the unarmed, helpless, and hunted to the fully equipped killing machine at the end of the game that also reflects the player's growth and experience...

The view stays consistent, but the dramatic position of the hero changes from victim to killer, while the game space changes from threat to familiar and mastered ground. (105)

In most videogames, this process can describe the macro-progression of the game, and occurs on the micro-level over and over again, as the game presents new levels and new obstacles to challenge the player, and the player develops new techniques and gains new equipment to conquer the opposition. *DOOM* can be read in such a manner, as the player shifts from the last survivor of a marine base at the beginning of episode 1 to the scourge of hell by the end of episode three. It is also a process that is repeated over and over again each time a player starts a new level, in that becoming familiar with a level's space is a necessary step in mastering that space. If the player restarts under a different difficulty, the process is inverted; the game space stays familiar, but the location and type of monsters changes, and the player must rely on the knowledge of the space until the new configuration is mastered as well. Pinchbeck affirms Nitsche's stance with a comment late in *DOOM: SCARYDARKFAST*, wherein he speculates that the absence of NPCs in first person perspective is done precisely to further the player's dominance over the gamespace (162). *DOOM*'s one constant is its perspective, the first person graphic-based view from which the player experiences the *DOOM* world.

In fact, Nitsche's third point on the perspective speaks directly to that constant, and how it begins to change as the genre ages. He states "the development of the first-person point of view remains character-centric but elaborates on the possibilities of staging this character to more precise and dramatic moments in the gameworld" (105). In later games, designers will go to great pains to create set pieces of visual spectacle, and it is not uncommon for such a game to remove the player's control of the camera for a period of time in order to make sure a particular spectacle is witnessed, effectively temporarily suspending player agency. *DOOM* has no such moment of suspension. While it does have what can be described as set pieces—

Pinchbeck identifies at least eight such moments in his "shot-by-shot" description of the game—the spectacles are those the player creates.

Above all else, the graphical realism of *DOOM* is predicated on the first-person perspective. The connection between camera and avatar presents the illusion that the player is directly participating in the gameworld before him or her; in fact, by basing the game around this perspective, id is tying the functional realism of the human gaze to the graphical realism the view provides. As Nitsche identifies, the cycles of progression underlying the game, creating a repeated sense that the player is growing in power, contribute to this sense of inhabiting and mastering a space. But at the same time, two things stand in the way of *DOOM*'s claim to graphical realism: the modern gamer's view of the game, and the text that seems to stand outside of its immersive first person perspective.

DOOM and Myst: A Graphical Realism that Doesn't Quite Fit

In its time, the graphics of DOOM were heralded as cutting edge and the height of realism; an enthusiastic gaming press raved about its "carpet, tile, ceiling panels and light fixtures," the rows of computer consoles, the bullet holes that remained after the player shot at the walls (Lombardi 104). Gamers looking back twenty years later have a different perspective. In his retrospective, LeBront argues that DOOM, while still being the progenitor of the modern FPS, is radically different. He states that far from *DOOM* being a new level of realism, there was no notion of realism in FPS design at the time at all, and *DOOM* focused on abstract play; more than anything, in fact, it focused on speed, as *DOOM*'s player-character "runs at 50 scale miles per hour – nonsensically fast by modern standards" (emphasis in original text). He concludes the article with a statement that draws attention to the push for graphical realism through technological improvement, but places *DOOM* outside this struggle: "As the march of technology has allowed ever-higher graphical fidelity, virtually every FPS since Doom has attempted greater and greater representation with its environments. ...designers of such games will always have to manage the tension between compelling fiction and optimal function, unless you are willing to go all out and have the kind of weird, abstract spaces Doom has." LeBront maintains that *DOOM* and the motivations behind it are fundamentally different than the modern FPS games, a point he reinforces rhetorically by never explicitly naming any modern FPS for comparison—for the purposes of the article, they are merely a mass concept to be held at a distance.

Pinchbeck agrees with the emphasis on speed, stating that, in comparison to the other big 3D world PC game at the time, he says that *DOOM* "was a Formula One car of a game,

next to *Ultima*'s camper van. ... the fact that *Ultima Underworld* isn't necessarily sluggish by contemporary standards may say more about a general drop in speed in *FPS* games since *DOOM*... something we might attribute to *Halo* and the rise of the console shooter" (36). Indeed, as comes out in many of the interviews with id employees, the company, like Cinemaware before it, was interested in recreating the speed of the arcade on a PC computer, in direct opposition to the slow, contemplative pacing that characterized the PC game of the time. Pinchbeck later considers the innovations that future games would bring to genre, such as equipment limits and crouch functions, and, following Romero's comments, concludes that the choice to exclude such superfluities reflect *DOOM*'s commitment to arcade speed (155).

At the same time, this commitment to speed does not necessarily mean that, as LeBront maintains, the game is meant to be abstract. In fact, id developers went out of their way to remove at least one element of abstraction. Throughout the game, the player may call up a map of the level that displays an overhead view of the portions explored thus far, with the PC represented as a triangle. When experienced playtesters of an early version of the game seemed to be relying too much on this mode, the id team removed the monsters' presence on the map, forcing players to focus on the first person view. John Carmack explained that "The game is not a challenge to be efficiently beaten. It's something you're supposed to experience" (Antoniades). It is less that *DOOM* was meant to be an abstract experience, and more that it appears to be abstract by current standards. In its own time, it was as vivid as anything most players had ever seen in a game.

LeBront's stance may even bring to mind Hutchison's argument, as the claim that *DOOM* is abstract hinges on the technology available to represent it. Significantly, Hutchison

is not the only one to make the case that the aesthetics of older games were determined, even limited, by the available technology. Despite his emphasis on experiencing a game rather than just beat it, John Carmack, the designer at id responsible for creating their game engines and the fundamental coding for the games, would quite commonly start on the next game while the rest of the team was still working out the finer details of the previous one, and he had no nostalgia for what he left behind. In a 1994 Game Developer Magazine feature on the studio, the author notes that "Talking to [Carmack] about the games he's worked on is almost anticlimactic because he always emphasizes how much better he could make them today" (Antoniades). More recently, Carmack bluntly stated that "The later Hell stuff looks like crap today, and that was a case of designer overreach. ... It's really only in the current generation of console games where we have enough horsepower that we can do a credible job of anything a designer can visualize" (Pinchbeck 100). The same holds for the other 90s epitome of graphical realism, Myst: Rand Miller's description of his new 2015 game Obduction in a Gamasutra feature is a blend of nostalgic references to Myst and careful highlighting of where technology allows them to expand on elements of which Myst was incapable. Like Myst, Oduction is to be a sci-fi fantasy realm with a focus on exploration, and like Myst, it will have little direct contact with non-player characters, because Miller feels that the technology to do such interactions convincingly is not yet developed, and so minimizing encounters "in some ways makes things more realistic." But *Obduction* can also include "real time" events that *Myst* was incapable of; Miller refers to the possibility of puzzles based around weather effects and the lighting at different times of day. In both cases, the creators are to an extent simply acknowledging that they can improve on old designs with new knowledge, but at the same time, they are

contributing to the notion that new technology means better games.⁴³

In all of these accounts, graphical realism is conflated with technological progression. If it is accepted that new technology, which is most easily represented through better graphics, is desirable and necessary in obtaining higher levels of realism in games, then an older game such as *Myst* or *DOOM* becomes increasingly less realistic as the graphics they contain age. *Myst* must give way to the fully 3D *RealMyst*; *DOOM* gives way to its own slew of sequels. LeBront is not incorrect when he states that *DOOM*'s speed implies a level of abstraction that makes it different from modern FPS; nor is the writer composing the preview of the game for *Computer Gaming World* incorrect in praising its attention to realistic detail. But when mimesis is equated with graphical realism, then the value of the games produced under that notion will always be judged by a scale sliding inexorably upward to the next technological advancement.

As graphical realism as standard warps perception of a game over time, it also fails to account for the purpose text serves in DOOM, just as it failed to account for the role of text in *Myst*. In his account of the first-person perspective before *DOOM*, Pinchbeck notes that the earliest attempts tended to place the player in the cockpit of a vehicle (7). *DOOM* eliminated the vehicle, but it did not eliminate the interior/exterior dichotomy that the vehicle represented; rather, it shifted it. The top four-fifths of *DOOM* illustrate the gameworld the player explores;

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Perhaps one of the more obvious incarnations of the "new technology = better graphics = better game" mentality is the slew of videogames that have been re-released in HD versions. Games such as *Silent Hill 2* and *Silent Hill 3* and *Kingdom Hearts Final Remix* and *Re: Chain of Memories* were previously released for the PlayStation 2, and more recently updated and released for the Xbox 360 and PlayStation 3. Both the *Silent Hill HD Collection* and *Kingdom Hearts HD 1.5 Remix* have been panned by critics for being buggy, mistranslated, and generally poor quality (Minkley, Schilling). One interpretation of the flaws of these remakes is that their developers devoted too much attention to the graphic-based technological affordances the new platforms offered, and failed to account for how the other aspects of the games needed to be adopted as well. If so, then the bugs of *Silent Hill HD Collection* and *Kingdom Hearts HD 1.5 Remix* are cautionary examples of the failure to adapt games to the technology at hand, and failure in prioritizing graphical representation above all else.

and the bottom-fifth, where the text is always present, is in the interior—but now, the interior IS the player character, and the text, alongside the rest of the HUD, does double duty as both representation of the PC and the mediator between the gameworld and the PC. To say that the graphics of *DOOM* represent a virtual world is true, but it is a world whose interpretation is constantly mediated by the framework of its text-heavy interface. The text here is a finely tuned feedback instrument, informing the player how the environment is affecting the PC. The text outside of the game, as in the option to quit screen and the difficulty choices, is a lifeline to the larger game culture *DOOM* is a part of. Under an absolute view of graphical realism, these text contributions are aberrations that take away from the game's realism. But to dismiss them in such a manner is to ignore the real contribution they make for guiding the overall reception of the game.

Despite being the paragons of graphical realism in their time, the narrative of technological progression surrounding graphical realism fails to account for significant portions of both *Myst* and *DOOM*. A different form of mimesis, one that acknowledges these contributions, is called for: Kendall Walton's version of mimesis, based around imagination and games of make-believe. Its utility is best illustrated with another game from the 1990s, *Planescape: Torment*, a variant in which it is text, not graphics, that dominates.

4. A Close Reading of Text Support in Videogames: The Case of Planescape: Torment

Introduction

Graphical realism's constantly sliding scale of what counts means that, despite its frequent use in videogame culture, it tends to dismiss the potential value of older games and game elements not seen as a part of graphics, such as text. An alternate model of mimesis, especially one modelled on play and games, would prove more useful for such elements. In *Mimesis as Make-Believe: On the Foundations of the Representational Arts*, Kendall L. Walton argues that, when faced with any sort of representation, a person engages with it via mimesis, but mimesis defined as a game of make-believe—and, furthermore, these games can be entered without any representation being present, as when a child has an imaginary friend. Under this theory, every representation can be thought of as generating a set of fictional propositions, statements that are true within the context of that representation; while Walton prefers to work with these propositions rather than fictional worlds, he loosely defines fictional worlds as the world associated with such a set of fictional propositions (64).

For example, the fictional world of *The Wizard of Oz* is defined by statements such as "In Oz, some animals can talk," and "Dorothy Gale lives in Kansas with her aunt and uncle." Further, when a person enters into a game of make-believe with such a work, she is not entering into that fictional world—rather, she is creating her own fictional world, where the fictional world of the work serves as a foundational basis for the fictional propositions of her world. That is, my interpretation of *The Wizard of Oz* creates a personal fictional world that is similar, but not identical, to the fictional world of *The Wizard of Oz*, because that personal

world has been shaped by my interpretation. ⁴⁴ Through this concept of mimesis of makebelieve, Walton argues that becoming immersed in a great work of literature is the same sort of activity as playing with dolls. Also relevant to make-believe is the notion of the prop, a real-world object that enables a particular type of fantasy. A stick found in a forest, for example, lends itself to use as a prop in a make-believe session where it is a sword for a warrior or a baton for a conductor, and does so fairly easily; its shape makes it less likely that it will be used as a prop in a game of make-believe that relies on pretending it is a kitten. In this sense, a fictional work world, and its material expression, can be thought of as a prop for the fictional world of the person engaging with it.

What I am proposing is that this concept of mimesis as make-believe, which Walton explored principally in terms of literature, film, and art, can be profitably applied to videogames. I am not the first to propose this connection, as various game studies scholars have noted the similarity, allotting it a varying degree of importance in their arguments. Marie-Laure Ryan argues, in passing, that it matches Roger Caillois' concept of paidia (45). Sebastian Deterding, in the course of constructing a "Fiction As Play" theory that unites various forms of fictional media, borrows from Kendall Walton alongside such thinkers as Johan Huizinga, Gregory Bateson, Erving Goffman, and Brian Boyd (2). Mark J. P. Wolf mentions Walton's concept of "reality principle" in reference to the process whereby an audience assumes a fictional world to be similar to a real-world analogue ("World Gestalten"130). While their

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Walton uses the term "work world" to refer to the fictional world generated by the work at hand, and "game world" to refer to the fictional world formed by an appreciator of that work world. However, since "gameworld" is used colloquially within game studies to refer to the work world of a videogame, I will use that term for the videogame work world, and "playworld" to describe the fictional world constructed in the player's mind. These terms are chosen to evoke Salen and Zimmerman's definition of play as "free movement within a more rigid structure" (*Rules of Play* 304).

focus on Walton is all minor, all of these scholars see a similarity between play as it is commonly seen in games of all kinds and the make-believe game that Walton endorses.

Two game scholars in particular, Grant Tavinor and Chris Bateman, have gone much further in their embrace of mimesis of make-believe, basing entire books on the subject. In *The Art of Videogames*, Tavinor argues that make-believe "seems particularly useful for explaining the fictive nature of videogames" (40), and embarks on a reasonably exhaustive exploration of how videogame designers encourage this passage into a fictional world, through its visual representations, socially encouraged acting through player involvement, and narrative techniques inherited from other mediums, including narration and cutscenes. In turn, embracing a fictional world of a videogame creates an emotional involvement, ⁴⁵ which, alongside the game's fictionality (ie., its tendency to be treated as a prop for make-believe), is part of what makes videogames art, as Tavinor describes in the final chapter of his book. For Tavinor, videogames are not only fictions that generate make-believe props, but also offer unique affordances for such fictional worlds, through their involvement of the player.

While much of Tavinor's work on Walton is to set up as a framework to build to his discussion on ethics and art as they relate to videogames, Bateman's *Imaginary Games* is centred on presenting Walton's arguments to a potentially unfamiliar game studies-based audience, and updating them for a twenty-first century, new media perspective. As such, much

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⁴⁵ In *Mimesis as Make-Believe*, Walton famously, and somewhat contentiously, argues that we do not feel emotions in response to representation, but what is better thought of as quasi-emotions, which is why we feel something resembling fear yet do no respond by fleeing the vicinity when we see a scary movie (241-249). For his part, in arguing that we respond emotionally to videogames, Tavinor maintains that the emotions are real enough, but the emotional relationship with the situation and characters involved must be recognized as fictional (141). In fact, Tavinor argues that the emotional involvement in videogames has advantages over some traditional media or even the "real world," in that they "allow us greater access to some kinds of emotionally provocative situations, given that acting in the fictional world lacks the costs of acting in the real world" and "allow us to *step into* fictional roles" (146).

of the book is spent responding to criticisms to Walton's approach, though Bateman also devotes a chapter to the discussion of ethics and videogames, drawing on Miguel Sicart's thoughts on the topic. Essentially, as Sicart argues, games such as *Fables* and *Knights of the Old Republic* claim to present moral choices, but truly ethical choices would present consequences without a handy morality gauge, and rely on the players to decide what ethical behaviour means. Bateman supports Sicart's argument through a consideration of gamer terms such as griefer and booster; players, he argues, create their own vocabulary determining what consists of proper play within a gameworld, a play that constitutes the boundaries of their own playworld (203-205). Like Tavinor, Bateman supports the make-believe theory as being useful for fiction in general, but particularly applicable to videogames.

Tavinor's art-based argument is directly relevant to the videogame shift towards graphical realism. In pursuit of his argument that some videogames qualify as art, Tavinor argues that videogames made before the 1990s do not qualify, as they seem "much less artful than recent games. This is because the aesthetic qualities that characterize recent games are mostly missing in earlier games, which were far more oriented around gameplay" (181). This statement is particularly odd, as it follows a paragraph arguing that an aesthetic assessment of videogames must include a kinesthetic consideration, that videogames must be considered in terms of the pleasures of their controls, which were certainly attributed to videogames before the 90s. ⁴⁶ Tavinor goes on to state that "the graphical limitations on early games restricted their aesthetic and artistic potential," that any beauty in *Spacewar* was accidental and based on its technological limitations, and that *Myst* represents a coming of age for the aesthetics of gaming

Tavinor sides with Denis Dutton in believing that the avant-garde is given too much weight in concepts of art (178-9). Given my previous argument that videogames from the 1980s have much in common with avant-garde typography, this may further explain Tavinor's distaste for the material.

(181-2). This argument is something of a slippery slope towards graphic-based progression, identifying superior technology with superior graphics and superior aesthetic dimensions. Through the juxtaposition of *Spacewar* with *Myst*, Tavinor is implicitly rejecting the origin of early videogames and replacing it with the origin of the "aesthetically sophisticated" videogames of the 1990s.

My purpose in introducing mimesis as make-believe is not to make it a template for all game studies; unlike some, I would not claim that virtually any videogame that can be named qualifies as a "walt-fiction" (that is, a fiction under Walton's terms) by virtue of it being a depiction or representation (Meskin and Robson 206). Rather, in a similar fashion as previous concepts such as the three-circuit model and paratext, the make-believe theory is another tool on the game scholar's belt, to be used when appropriate. Like any theoretical frame, it acts as a lens that clarifies some elements while obscuring others. The make-believe theory works poorly with the three-circuit model—or at least, one potentially eclipses the concerns of the other—in that a close focus on the gameworld and playworld that a videogame inspires may obscure the cultural, industrial, and technological basis behind the game—even when it is that basis that provides the foundation for how the representation is created. On the other hand, it seems reasonable to speculate that paratext and the make-believe theory would work well together, as the very definition of paratext is that which is outside the text but influences its reading, which would mean that paratext is a formative part of most, if not all, resulting gameworlds.

Mimesis as make-believe should be considered in terms of what it has to offer game studies in general, and what it has to offer the discussion of graphical realism and the use of

text in games more particularly. Relevant to the general point is Jesper Juul's categorization of videogames, as stated in the opening pages (and subtitle, for that matter) of Half-Real: Video Games Between Real Rules and Fictional Worlds: "to play a video game... is to interact with real rules while imagining a fictional world, and a video game is a set of rules as well as a fictional world" (1). This position is a notable shift from Juul's previous allegiance with the ludologist perspective that games and stories are incompatible forms of engagement ("Games Telling stories?"). Viewed in that light, declaring videogames to be half-real is a compromise between two untenable oppositions. Its great benefit is that it foregrounds two major elements that generally constitute most games to one degree or another: rules and fiction. But Juul's phrasing instead of uniting them places them in opposition, perpetuating the narratology and ludology argument and placing it at the heart of each and every game; by attaching "real" to rules, it implies that the rules of an individual videogame don't just mimic reality, they constitute reality, in a way that fiction, and a fictional world, does not. Rather than resolve the tension between narrative and game, Juul's half-real entrenches it, and places rules in ascendance.

I would argue that Walton's make-believe theory poses a way to cut through the Gordian knot of narratology and ludology,⁴⁷ one that moves beyond the somewhat formalist definition to incorporate players' engagement with games and fans' engagement with paratext. Not coincidentally, it is also a concept of mimesis that provides an alternative to the graphical

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⁴⁷ It should be mentioned that Juul is familiar with Walton, as the use of the term "fictional worlds" suggests. In an interview with First Person Scholar, Juul volunteered that he used Walton in his PhD thesis to discuss fiction, but wound up removing him from *half-real* ("Interview—Jesper Juul"). Indeed, Walton's influence can be plainly felt in the book, especially in subsections such as the one in which Juul contrasts real and fictional statements (166), a subject Walton spends considerable time on in his own book. Juul does not qualify the reason for removing Walton, though he does use him in a later book, *The Art of Failure*, in which he characterizes Walton's quasi-emotions as "pretending to feel," which I would suggest is a misreading of how Walton portrays quasi-emotions.

realism paradigm that dominates discussion of videogames from the 1990s. In Walton's terms, a fictional world—the gameworld, under my terminology—is the set of all propositions that hold true within the official constraints of the work at hand. That definition means that, for a videogame, a gameworld is not formed primarily by "real" rules then covered over by a representational sheen, but by anything that is true in the game, which could include narrative and rule-based propositions. For example, in the soon to be discussed game *Planescape:*Torment, it could be a narrative fictional truth that team member Morte is an untrustworthy floating skull and a rule-based truth that he currently has a dexterity of 12, and both of these truths together can form how the player fits Morte into her version of the playworld she and the game create.

Granted, such a world may then be incomplete or even outright contradictory, as when, for example, the player-character has an inhuman strength of 22 (high teens being the limit of mortal strength) and is still unable to break down what appears to be a wooden door because the developers decided not to put anything behind it. Such a world may contain propositions that are inconsistent with each other, but the world itself is not inconsistent with Walton's theory, as he includes the works of Escher, Kafka, and Hogarth's "False Perspective" as potential fictional worlds (64). Further, the paratexts of the game—for example, the player's familiarity with the *Dungeons & Dragons* system—can also inform how the player conceives of the playworld, drawing in her awareness of fictions that extend beyond the gameworld at hand. The point is, under the make-believe theory, the so-called ludo-narrative dissonance that is generally regarded as one of the reasons that videogame rules and fiction are in tension is less a detriment and more a feature, and elements that can be identified as rules or fiction or

both are all part of what creates the overall gameworld.

Further, Walton's make-believe theory calls for dissolution for boundaries between high and low art, which translated into videogames includes a dissolution of text and paratext, designer and player. Under Walton's argument, anything that can be used as a prop is of potential use in a game of make-believe, which means that the same human behaviour occurs in a child's game of cops and robbers and with an adult walking through an art gallery. In game criticism, the pursuit of a definition of games has been criticized as overly formalist, at the cost of alienating marginalized developers and players (Yang "A letter to a letter"). But under mimesis as make-believe, what constitutes the videogame is more than just what the designer intends. It is also the playworld the player constructs, which may consist not only of what is represented on the screen, but also, as the next section illustrates, the paratexts that inform the player, the experience of the player from previous games, and the player's participation in larger playing communities.

Make-believe and the graphical realism of the 90s

Of course, given that the focus here is on textual representation, what is represented on the screen is currently the paramount issue of interest, and in that regard, mimesis as makebelieve presents an alternative to graphical realism, that it is not sophisticated graphics that draw a player into a particular game but the capacity it allows to engage in games of makebelieve, and in granting this alternative, one makes more room to acknowledge the contribution text provides. King and Krzywinska suggest that graphical realism has its limits, that a game need not be realistic, as long as it is believable: "Even if an environment or character bears little relation to what we might encounter in the real world... a high level of detail in appearance and movement can increase the degree to which it seems believable, in its own context, no matter how fantastical its nature" (132). Granted, they are speaking in defense of their own concept, functional realism, but their focus on belief supports the concept of mimesis as make-believe, that perfect resemblance to some notion of the real is less important than how a given prop contributes to the sense of the gameworld as a whole, to the total sum of fictional propositions. And while "appearance and movement" lend themselves more to graphical depiction than textual, text is more than capable of adding a high level of detail, 48 as we have seen. Many of the games discussed thus far benefit from a consideration of mimesis as makebelieve. Addressing the reader as someone other than Mario in the Super Mario Bros. 3 instruction manual is inconsistent with the gameworld established by the main text of the game; instead the letter from Mario and the comic book word bubbles of the Koopalings amount to a

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In fact, the concept of a "high level of detail" itself is probably misleading, as pairing the term with visual depictions leads to an association with graphics and technology. It would be more appropriate to say that a videogame prop's realism matters less than how it relates to the rest of the established gameworld. Further, this relation can be more of a juxtaposition than a contribution to a unified world, as in the imaginative chaos of *Scribblenauts Unlimited*.

paratextually described rivalry that the game itself does not dwell on, but can be incorporated into the playworld of the player, if she chooses to do so. Likewise, in *It Came From the Desert*, the text describing small town geologist Dr. Greg Bradley's lust for gangster moll Jackie--"I wasn't listening to a thing she said, just watching the soft pouting cherry lips kissing words across the room to me... Sure, Jackie, whatever you say"—is, strictly speaking, fairly irrelevant to a videogame whose major concern is gathering evidence to prevent a giant ant invasion, especially since most players will fail to be at exactly the right locations at the right time to advance their relationship to its conclusion. But for the player who chooses to pursue that plot line, it provides fodder for a playworld involving a blistering romance (or, alternatively, a playworld where your protagonist is a blistering misogynist).

Further, as previously established, *DOOM* and *Myst*, two videogames heralded as landmarks in graphical and technological prowess, have elements that cannot be accounted for in terms of graphical realism; mimesis as make-believe is a counterpoint to the established graphical realism narratives surrounding the games, one that speaks more to their lasting influence. As Kevin Cloud states regarding *DOOM*,

Realism is hot..., but I don't even know if that's a valuable goal. Believability is though. In an FPS, a person needs to be able to suspend disbelief enough to feel like he is participating in this world. Ultimately it's like cowboys and Indians. A person is, at least in *DOOM*, a hero, and you don't get a chance to do that in the real world very much. ... But believability and realism are two different things, and sometimes I think we go too far in trying to create a realistic environment. (qtd. In Pinchbeck 146).

This passage appears in the middle of Pinchbeck's discussion of *DOOM 3*, in the context of

how it becomes difficult to maneuver in its object strewn environment, a contrast to the more abstract, open spaces of the original *DOOM*. In particular, Cloud is suggesting a difference between a realistic gameworld and a believable one, that a world that appears visually similar to the world outside the game is less ideal than one that enables the player to make-believe her role as a hero. It also suggests a potential flaw in functional realism as Krzywinska and King describe it, that while the furniture and debris may make for a "high level of detail," they also get in the way of the hero game that the props of the gameworld are designed to encourage. Though his choice in children's game may leave something to be desired, Cloud's comparison between DOOM's play and children playing cowboys and Indians reinforces Walton's theory of make-believe, that appreciating a representation—like, say, a videogame—is an activity similar to child's play. And if Cloud's statement that *DOOM* is about making the player a hero, then it should be acknowledged that the type of hero it endorses is very much reinforced by the text. As stated in the previous chapter, the text in the level names, the exit prompt, the difficulty settings and other areas where the text is prominent may not directly have anything to do with graphical realism, but they can certainly be considered props to enable the player to play as the game's machismo-driven, ultra-violent hero. Cloud's concessions to believability over realism in *DOOM* highlight the advantages mimes as make-believe has over other lingering concepts of mimesis and realism, and how the text reinforces that make-believe.

In *Myst*, on the other hand, "high level of detail" is a fairly apt descriptor for what the text in the game supplies. But the lush visuals only go so far; the empty ruins the player ventures through, the abandoned but advanced technology, and the dark secrets implied by the hidden rooms of the sons of Atreus do much work to establish the tone of the game, but it is the

words in Atreus' journals that link them all together and unite the isles of *Myst* into a full gameworld. Further, the underlying lesson of the game, that writing and creating books create worlds that the authors do not entirely control or own, has an obvious resonance with not only make-believe theory but also the participatory nature of videogames. In that sense, the *Myst* journals serve as a bedrock paratext for an entire community of *Uru* (the online game based on the *Myst* series) fans and players. The fan community surrounding a videogame, particularly one as long-lasting and dedicated as the community for *Uru* illustrates how a playworld can be shared around multiple people who agree on certain rules for how that playworld is to be interpreted, and in the case of *Uru*, those rules are inscribed in text in addition to actual play.

In her essay on this community, Celia Pearce (writing under the joint names of Pearce and her in-game avatar Artemesia) references the community's textual ties in creating D'ni dictionaries, fan fiction, a magazine, and noting that it is one of the few videogame franchises "that has never been extended to any media beyond written or recorded books" (164). Granted, the most interesting aspects of *Uru* are less its textual antecedents and more its devoted community, who went on to create several Uru substitutes on a variety of other servers after the original site shut down. Pearce argues that the "Uru Diaspora" is an example of something that is often seen among intense fandoms: fictive ethnicities, or "attachments to ethnic identities of nonexistent, fictional cultures" (178). The concept of fictional ethnicities works well with the make-believe theory, as a performance of a shared, communal playworld. Though it was *Myst*'s vaunted graphics and the technological sheen of CD-ROM technology and CGI visuals that originally garnered it an audience, the smaller but vocal player community of *Uru* continued and reconstructed what they thought were the best elements of its gameworld. While these

players deserve the brunt of the credit for the long journey of shaping the gameworld started by *Myst* into a community of play, it was the text and imaginative, book-based creation described in Atreus' journals that first forged the trail.

The make-believe theory fits in where graphical realism may fail, allowing for a different account of how players appreciate a game. For Myst and DOOM, it illustrates how the games and their players reach beyond graphics to create a community of fictional lore involving text and image, and fit in influences beyond videogames' technological push. To further demonstrate the value of mimesis of make-believe as a platform for exploring the use of text in videogames, it is important to investigate not just games that lay claim to the graphical realism narrative, but also games that function more as variants from that path. To that end, the make-believe theory surpasses graphical realism as a framework for understanding the salience of the main focus of this chapter, Black Isle's *Planescape: Torment (P:T)*. In terms of its plot, its focus on belief, and its proliferation of text, P:T relies on the make-believe theory to draw its gameworld together. Even beyond the make-believe theory, P:T's heavy reliance on text makes it a valuable game to examine, in terms of its approach to self-inscription, text-based portrayals of speech, literary figures such as ekphrasis and riddle, and identity. In *Planescape*: Torment, Black Isle presents a game where belief literally has the power to change existence through the use of a word.

Planescape: Torment: Text-based Game?

Myst and DOOM both loom large in the history of videogames, and were undeniable successes soon after their releases. Planescape: Torment, the 1999 game developed by Black Isle Studios and originally published by Interplay Entertainment, has a much more checkered past. In very broad strokes, Planescsape: Torment is a computer role-playing game using a pre-existing game engine and both rules and backstory derived from the Planescape subsetting of Dungeons & Dragons. The game starts with the player playing an amnesiac immortal who is awoken by a floating skull, and tasked with breaking out of the mortuary in which the immortal, mistaken for a corpse, has been interred. The action of the game concerns the immortal—often called The Nameless One, or TNO by the game's player community—uncovering his past identity(ies) by hunting down a series of journals he wrote that are hidden throughout the game's city, Sigil; determining the source of his immortality; and answering, however ambiguously, the game's repeatedly asked question: "What can change the nature of a man?".

While the game has since risen to some fame, partially inspiring two well-funded Kickstarter campaigns, ⁴⁹ at the time of its original release, it was critically acclaimed but sold poorly. In an interview, lead designer Chris Avellone attributes this failure to three factors: the game's relatively unusual fantasy setting, marketing which focused too much on it being unusual, and the game's demands on the player, that "there's a lot of reading, and people don't buy games to read, they buy games to play them" (Avellone and McComb). It is the third point

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⁴⁹ The designers of both Obsidian Entertainment's *Pillars of Eternity*, which amassed \$3 986 929 in excess of its \$1 100 000 goal (Obsidian Entertainment) and *Torment: Tides of Numenera* by inXile Entertainment, which amassed \$4 188 927 in excess of its \$900 000 goal (inXile Entertainment) referred heavily to *Planescape: Torment* as direct inspiration for their creative visions, which illustrates that there is considerable current demand for games in the same vein.

that makes the game obviously of interest to a focus on text in games, and indeed, it is frequently cited as having a script containing 800 000 words (Griliopoulous; Gillen; Miller). At that length, P:T contains more text than most text-based games, not to mention novels. In the context of the emphasis on graphical realism in 1990s videogames, P:T stands out as a variant, an alternative configuration whose composition suggests a different way of addressing the mimetic potential of videogames. As such, there are three elements of P:T that warrant close attention based on its use of text and text-inspired gameworld: its starting interface and underlying platform, its plot in action, and, contrary to its lead designer, the way in which, by basis of Kendall Walton's theory of mimesis, playing the game and reading the game can amount to much the same thing.

Starting with interface, the first element of note is P:T's title screen. The title screen, the screen that appears between loading the game and going through the opening cinematics and actually entering the gameworld, is perhaps the most ubiquitous part of a videogame, something present in nearly every genre and platform. Even text-based games have an equivalent (what Montfort calls the initial output (25)), and it would be extremely rare for a videogame released currently not to include one. In terms of Genette's concept of paratext, the title screen is an example of epitext, that which lies on the threshold of the game "proper," yet still has a location within the game. If the game box can be considered the rough equivalent to the book dustcover, 50 then the title screen is the equivalent of its cover. Like the book cover, the title screen must pass in front of the reader or player every time the book is picked up, or the game played—in fact, the game played may involve more frequent returns, as many games

Though not quite vanishing in the same way as instruction manuals, the game box too is becoming increasingly less important as PC publishers and even console publishers switch to digital methods of distribution.

return the player to the title screen upon PC death. Jonathan Gray distinguishes between a gateway paratext, one that is meant to introduce an audience to a work, and an in medias res paratext, which is meant to support a work with which they are already familiar (35). A title screen must serve both roles, making it a highly salient part of any videogame which includes it. As discussed, the title screen for *DOOM* oriented the player to the game's humour and cultural standing, through (among other elements) its descriptions of difficulty settings; the title screen of *P:T* performs a similar orienting purpose, alongside its more obvious functional roles.

Planescape: Torment, like many games, combines its title screen with the initial menu of options. Generally speaking, the options for a title screen are placed in hierarchical order. The most commonly used options—usually "New Game" or "Load Game—are placed at the top. Other options, such as Gallery (art that inspired the game) occupy the middle section, and the last option is usually some form of settings or configuration. This design is in part an inheritance from videogames designed for home console or arcade; options are selected by pressing up or down on the directional pad, and the most frequently accessed option is placed at the top for the player's convenience. A PC or touchscreen game, however, can use other models, since the effort required to move a mouse or finger to one area of the screen as opposed to another is, at least in comparison to a console, trivial. Most PC games still stick to the traditional model, but P:T is an exception. Rather than a hierarchical ordered list, it places its menu options along the rim of a circle. While this method would be cumbersome for a long list, it works quite well for the three options the game offers. Starting at the upper centre of the menu set and moving clockwise, the player may choose "New Life," "Resume Life," and "The Abyss." The first two options, respectively, begin a new game and load a saved game, and the

last option returns the player to the desktop. These headings attempt rhetorically to reverse the common "magic circle" notion that the game is separate from "real" life. Rather, as P:T's headings would have it, the game is life, and that which is separate from the player's playthrough is nothingness. The headings fit with the game's preoccupation with life, death, and what lies after death; but moreover, they also fit with the purpose of the radial menu. The radial menu is not quite a disruption of the hierarchical list. Rather, it is a redistribution of hierarchy, as "New Life" is prominent at the top center, and "Resume Life" and "The Abyss" receive equal weight, sitting at opposite sides, right and left respectively, below. More than anything else, the radial menu, like its headings, signal to the reader that she is playing a very unusual game, that she should be open to an unusual fictional gameworld.⁵¹

In the game proper, however, *P:T* follows rules already established, largely as a consequence of the game engine that runs it. The game functions under the set of processing algorithms called the "Infinity Engine," licensed to Black Isle by its developer, BioWare. The engine uses a three quarters isometric perspective, with pre-rendered 2D backgrounds and sprite-based characters, a far cry from the first-person 3D experiences that were being heralded as the new standard for gaming with *DOOM*, six years earlier. Further, the Infinity Engine was designed to run under the game rules established by 3rd edition *Dungeons & Dragons*, which meant that there were predefined rules for the way combat unfolded and for the set of statistics which would govern how the parameters of the player-character and its associated party would be defined. There are at least two major advantages in using an existing game engine from a design perspective; it saves the designers from having to program a system from scratch, and,

As Avellone noted, being unusual is not necessarily a good thing, and in this case, the menu's headings and radiality work against its functionality; even after playing the game for multiple hours, I was still prone to accidentally selecting "Resume Life" when I wanted to quit, and "The Abyss" when I wanted to start playing.

when it comes time to market the game, there are already other established games to which the publishers can refer to establish a baseline of comparison for the player. The disadvantage, aside from the expense of affording a license, is that using a game engine developed by a third party places strict limitations on what the designers are able to do.⁵² As such, when considering the use of text and image in *Planescape: Torment*, it is best to think of the interface as a basic frame within which the designers could employ their own tactics to direct attention and imbue with meaning, much as the gameworld functions as a frame for the playworld of the player.

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The same case could be made for hardware, and designing for a specific console; third party developers, for example, had a notoriously difficult time working with the Sega Saturn, and the Nintendo Wii U today gets many exclusives and misses out of many multiplatform games simply because its touchscreen design and wiimote require much different design approaches than the other current gen hardware platforms.

Reversals and a Quest for Identity: The Plot and Setting of Planescape: Torment

An entire book could be written on the story behind *Planescape: Torment*, ⁵³ but a few brief words on plot and setting will have to suffice before considering directly how the game appropriates text and language in the name of make-believe. P:T is largely set in Sigil, a city thought by its inhabitants to be the center of the multiverse by virtue of the multitude of portals that are in it, which are said to lead anywhere and everywhere that exists, provided the proper key can be obtained, and even the name "Sigil" is suggestive of the relation between symbol and reality that the player is encouraged to consider. The potential of the portals also works to the game's favour, as even though most of the game is contained in the urban fantasy city of Sigil, the portals' presence fictionally allow a shift to any other locale at a moment's notice. The lineage of P:T means that it inherits a varied hodge-podge of fantasy tropes: it is based on *Planescape*, which in turn is a subsetting of the *Dungeons & Dragons* universe, which in turn is heavily based on J. R. R. Tolkien's books and 60s and 70s pulp fantasy stories. In practice, these tropes are relevant to the game not because P:T draws on them, but because it acts to subvert them. The original vision statement for the game makes it clear that this subversion is deliberate: "Forget fragile elves, rock-humping dwarves, worthless hobbits and with them, the mind-numbing boredom of every RPG ever released. ... No more high-fantasy-ride-across-theland-and-uphold-the-good-by-killing-the-evil-wizard-with-the-magical-sword bullshit" (emphasis in original, *Last Rites* 9).⁵⁴ Though Avellone in retrospect acknowledges

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And, in fact, there has been, considering the game received a novelization shortly after its release.

This quotation is typical of the language used throughout the document; it is notable how similar in tone it is to the general demeanor of the id studios developers, despite the vast differences between the types of games the two companies produced. While two studios obviously cannot be taken in isolation as representative of the industry as a whole, it is suggestive of nature of the culture that existed among smaller PC-based game developers in the 90s.

Planescape: Torment's deviation from the norm as a major factor in its financial failure, it was in the original conception exactly what the designers were trying to accomplish.

It is certainly a philosophy that they took to heart, as P:T is littered with subversions and reversals of typical fantasy expectations. The game's high-class brothel is the Brothel of Slating Intellectual Lusts, in which patrons can enter into stimulating conversations with the staff (a subversion that does not entirely work, as the staff is still composed of attractive, young women—albeit women who also may be blue, reptilian, or robotic). The game's largest dungeon is presented deliberately as a parodying slog of the dungeons found in most RPGs. It is populated by "low-threat constructs" who inform TNO that he should indeed be frightened by their growls because, as the game describes, "Grrr is a sound indicative of a threat" and when slain, the constructs may drop "A Magical Item!", which is the game tells the player is magical, but also worthless. Death, usually an event that separates player from gameworld at least temporarily, is written into the game's plot, as TNO's undead/immortal status allows him to revive himself after a short interval—in fact, certain areas of the game are designed so that the PC can only advance by committing suicide. The typical good/bad morality found in fantasy role-playing games is complicated by the option to ideologically ally oneself with Sigil's many factions, such as the Godsmen, who believe that anyone has the power to attain divinity through labour and participation in widespread industrialization, or the Sensates, who believe that the truth of the universe can be determined—and only determined—through direct sensory contact. Finally, and most relevant to the issue at hand, while most RPGs revolve around combat, and use interactions and discussions in towns as a form of reward and lull between fighting sequences, *Planescape: Torment* inverts this process, by making conversation

the main activity, and fighting the occasional alternative. It is largely through the actualization of this reversal that P:T is one of the longest text-oriented commercial games ever released.

Planescape:Torment is a massively long game—a Youtube playthrough series, for example, in which its player read out loud all of the game's text, runs for over fifty hours (Dansgaming). Any description of its plot, then, is to be understood as a truncation and simplification, but some account is necessary for a discussion of how its themes relate to text. In short, the game can be described in five movements. The first is what functions as the game's tutorial sequence, in which the player, as the amnesiac known as The Nameless One, wakes up on a dissection slab, meets Morte, and must escape the Mortuary while evading the Dustmen, members of the Sigil faction dedicated to preserving the bodies of the dead while simultaneously resurrecting a portion of them as zombies to serve as their menial labourers. With the PC out of the Mortuary and into Sigil proper, the next phase consists of following the instructions tattooed on his back and relayed by Morte, to seek out a man named Pharod and regain a lost journal, both of which are presented as vital tasks for regaining TNO's lost memories. Once Pharod is found after a tour through the slums of Sigil, the third movement begins, as the PC completes a task for Pharod that takes him through Sigil's underground populations. In the process, the PC is eventually led to the place where TNO died before waking at the Mortuary at the start of the game, and learns that he was slain by mysterious shadows. Shortly after receiving this information, Morte is kidnapped by were rats working for a local sorcerer, and in the process of retrieving him, the player further learns that these shadows have been pursuing and killing TNO across lifetimes.

That revelation sets up the fourth phase of the game, a search for Ravel Puzzlewell, the

nighthag (an entire species whose members are all witches, essentially) that granted TNO immortality. That search takes the PC through the industrialized and elite sections of Sigil, before eventually winding up in another plane entirely. It is here TNO learns that the loss of memory that accompanies each death is slowly driving him insane, and the only way to halt the process is to end his immortality (and in the process, regain the ability to retain memories and form an identity) and reclaim his mortality from the leader of the shadows, the Transcendent One. The last portion of the game is discovering how to reach his fortress, (which itself is a very long process that involves freeing, interrogating, and defeating a renegade angel) and confronting him. In a rather complicated twist, the player learns that the Transcendent One is the Nameless One's mortality, stripped from him and made sentient by Ravel's magic. It is this separation that allows TNO to be immortal, and the Transcendent One seeks to keep TNO amnesiac and weak to protect its own independent existence. Typical to the game's ethos, there are several ways of concluding the confrontation with the Transcendent One, where arguably the most satisfying choices involve simply talking the Transcendent One into surrender. The approach the player chooses determines which of the game's endings she receives.

The overarching plot speaks again to the reversals at the game's core. While many games feature an amnesiac protagonist who sets out to recover his or her identity, this discovery is usually folded into a larger process of saving the world. In *Planescape: Torment*, the stakes remain the same throughout (minus potentially saving a city from the vengeance of a renegade angel, at any rate): the ultimate goal is to discover and affirm who the Nameless One is, and what relation he has to the past he uncovers. My argument is that this affirmation of identity is performed over and over, by both the player and the game, in such a way that it

requires mimesis as make-believe, a version of mimesis that relies less on the presented visuals of graphical realism and more on performance and participation. Further, as befits a game that tries so overtly to establish itself as a variant separate from the established norms of its era, this affirmation is accomplished chiefly through textual means. An inverted ekphrasis ensures that the technologically-induced graphical limitations of the game's depictions become textual strengths through description. Tattoos are continually represented as practices and commodities in which identity is physically inscribed on the body. Spoken language, represented as text, is a consistent marker of status, sanity, and otherness. Written journals are the storehouse and epitome of memory. And finally, naming and riddles function as arbiters of self-knowledge and belief.

Are A Thousand and One Words Worth More Than A Picture? Reverse Ekphrasis in Planescape: Torment

The search for Ravel Puzzlewell may take the player to one of the game's more opulent locales, the Art House, which contains several otherworldly paintings and objet d'art. To give one example among many, a painting in the north east section has only abstract shapes: a brown and yellow splotch in the top left, and a wisp of brown in the bottom right corner, all on a black background.⁵⁵ Clicking the cursor on the painting yields a description that provides more detail (an understatement):

This painting is a dark cityscape, a far-away view of some giant center of civilization being burned to the ground. The streets of the place are empty, however, absent of soldiers, refugees, and even corpses. A placard reads 'The Folly of Udo.'

The curator, Yvana—who, in another of the game's reversals, has temporarily blinded herself to better appreciate the art from a new perspective in the future—relates a more exact history:

This painting illustrates one of the legends of the Prime world Goha. Udo was a wizard-king of such skill and power that he set to casting a spell that would turn himself into a Power, and the people of his great nation into divine servants. With the spell's completion, lightning crashed down around Udo's palace setting it all ablaze and, before the thunder had died away, the city was empty... not a living thing to be found. Over seventy-thousand people vanished, without a trace, in a heart-beat. No one knows the fate of Udo or his people.

"No one" in this case extends to the Nameless One, as there is never any option to travel to

While one may imagine a version of the Art House wherein this abstraction is deliberate, that the paintings are in fact abstract paintings, the detailed description provided when the player investigates the paintings suggest that this is not the case.

Goha, and no further information regarding Udo or his people is forthcoming; besides reinforcing the general theme of hubris and power, the painting serves no purpose in the rest of the game beyond providing the player with fodder for her playworld interpretation. The image of the painting in the game gives no indication that a city is being depicted. Even knowing what it is meant to portray, it requires some generosity to interpret its shapes as flames. The impression by examining the painting is absolutely necessary to determine its meaning—not to mention its name—and it is only after investigating the painting that the PC even has the option to ask Yvana to expand on its significance. Each painting in the gallery has a similar triad of information: an image, an impression of that image described in text, and expert knowledge provided through consultation with the curator.

Existing theories on the relation between text and image are useful in determining what the paintings of the art house are asking of the player, particularly concerning the theme of reversal. In his famous essay "Rhetoric of the Image," Roland Barthes interrogates an advertisement in order to investigate its semiotic possibilities, and separates, among other aspects, the caption of the advertisement, its linguistic message, apart from the message of the image (26). The linguistic message—in this case, the caption for the photograph in the ad—serves as an anchoring of the image, a repression of other possible meanings. This repression is even evident in "the paradoxical case where the image is constructed according to the text," as he argues that "it is the image that is read first, and the text which has generated it ends up being the simple choice of one signified among others" (29). The case of The Folly of Udo is slightly different. The text does repress alternative meanings, but it is largely up to the text to provide more meaning than the indistinct image that constitutes the painting itself, as the vague

blurry shapes that the Infinity Engine can supply amount to little more than an indistinct blur. In fact, it is easier to argue the reverse: the relation of Udo of Goha and his vanished people to the player-character is established as a distant one, by virtue of it being relayed through the player through an intermediary—via Yvana's historical account prompted by the Nameless One's closer investigation of an abstract blur framed on a wall in the Art House. In most games, a location such as the Art House would be an opportunity to dazzle with amazing graphics; as befits its status as a variant, in *P:T*, it serves as showcase for its descriptive text.

The gallery, filled with unique and entirely blurry and indistinct works of art, is an intensified example of an abstraction of image that the player has been confronting the entire game. Due to the limitation of its graphics hardware, *Planescape: Torment* has only so many unique sprites with which to populate Sigil and the multiverse to which it connects. Many of the less important NPCs re-use the same sprite, to the point where encountering a new sprite type is in itself a sign that someone of significance has been found. For every NPC, the first time TNO attempts to speak to him or her, a short text description is provided. As a result, characters that appear identical are described as being radically different. For example, Baen the Sender in the northeast Hive and O in the Smoldering Corpse Bar are both represented by a young, simply-dressed male sprite, though the former is dressed in lavender and the latter in gray. Baen's description marks him as different from the people around him:

You see a heavy-set man with sharp features and a pained expression. Despite his huge frame, however, he has an effeminate look about him, and unlike the other residents you've seen, he looks to have bathed recently. As you approach, he looks up hopefully and calls out in a high voice.

O's description marks him out as a whole separate order of different entirely:

You see a man, standing stock still. He isn't moving a muscle. ... His eye sockets are empty holes in his face. Contained within their bounds is a flat gray light that seems to dance with possibility. Looking into the sockets, the eerie, empty feeling of a limitless void shivers through you, as if you had gazed into a sliver of eternity. The head slowly swivels towards you (you notice that no muscles appear to move under his skin as he turns), and he speaks in a pure, bell-like tone.

What stands out about Baen's description is how much it is at odds with his actual depiction.

Thanks to the limited number of sprites in the game, he actually does not appear that different from the other residents, and to represent him as described would be more than the Infinity Engine could manage—even today, an attempt to visually render a "heavy-set man" with an "effeminate look" in a videogame would likely result in a caricature beyond what the Black Isle developers intended for the character. And if it would be difficult to capture Baen, O's appearance would be nigh impossible; the metaphoric nature of description, involving a "light that seems to dance with possibility" and gazing "into a sliver of eternity" moves to abstractions that resist visual rendering. At the very least, the complexity of such visuals would be far more taxing on the game's resources than the description already present.

In the Art House, the discrepancy between abstract image and description and history is so extreme that it is almost comic. The mismatch between the descriptions of NPCs and their shared sprite is of a different sort, in two ways. First, the sprite is a much better match for the character than the image of the paintings to their subject matter. Characters that are characterized as old women use the old woman sprite, elderly male merchants appear short and

stout, and even in the extreme case of O, the middle-lower class male sprite is as fair a representation as any of the shells the entity known as O may choose to inhabit. Second, there is a ubiquity to the NPC mismatches. The Art House is an area unlike any other part of the game, and may in fact be skipped entirely. But the player will see the same sprites with new descriptions and names over and over again. For these descriptions, both Barthes' articulation of the image and text relation and the inverse situation that seems to hold for the art house holds in a different way: the image's role in anchoring the text changes, since it is a mass produced image that provides much of its significance through the repetition. In terms of the text anchoring image that too is not entirely the case as it implies the image is the main focus, that it identifies the NPC uniquely; again, its mass-produced origin does not allow for that identification.

Another type of reversal is at work, a reversal of ekphrasis. Ekphrasis, as W. J. T. Mitchell defines it is "the verbal representation of visual representation," such as Wallace Steven's "Anecdote of a Jar" or Shelley's "On the Medusa of Leonardo Da Vinci in the Florentine Gallery" (152). Further, Mitchell argues that there are three moments of realization involved in ekphrastic apprehension. The first is indifference, and "grows out of a commonsense perception that ekphrasis is impossible" (152). A verbal representation can never encompass entirely a visual representation, and thus any attempt to do so can be ignored, or relegated to an area of lesser interest. Second is hope, when "the impossibility of ekphrasis is overcome in imagination or metaphor." This hope, extended to its limit, makes it appear as if all images can be represented by language, that the divide between image and text has been effaced. This enthusiasm is countered by the third and final phase, the "ekphrastic fear,"

wherein the indivisibility of media is something to be desired, that "the difference between the verbal and visual mediation becomes a moral, aesthetic imperative" (154). The root of all three moments, he suggests, is a process of othering, "thematizing the 'the visual' as other to language,' 'a threat to be reduced' (ekphrastic fear), 'a potential same-to-be' (ekphrastic hope), a 'yet-not-the-same' (ekphrastic indifference)" (163). By Mitchell's account, ekphrasis is no mere literary trick but a linguistic form of our dismissal, hope, and fears regarding image and language.

The reverse case of ekphrasis, the case where visual representation is made of a verbal representation, drives the difference between sprite and text in *Planescape: Torment*; arguably, it also drives the game industry's intense focus on graphical realism. In the latter, while the visual representation is not necessarily based on verbal accounts, the three phases of ekphrasis Mitchell identifies are at work. The hope phase of ekphrasis the most dominant, in proclamations that the latest 3D environments create, and are even necessary to create, immersive gameworlds, all based on the newest cutting-edge technology graphic engines. Indifference sinks in as the new graphic becomes passé, an indifference that turns almost to contempt when the new graphic improvement arrives to supersede the old. Even the "ekphrastic fear" is represented, when designers deliberately reject the latest graphics and choose a "retro" or "old-school" style, claiming (if not always explicitly, then certainly implicitly) that the retreat from graphical realism is a return to authenticity that has been lost.

More specifically, reverse ekphrasis can explain *Planescape: Torment's* unique texts paired with overused sprites, as another gap, a technological one. The othering aspect that Mitchell identifies in ekphrasis occurs here, ironically, because of a failure to differentiate the

others in the game. Because so many NPCs look alike, the character the player sees is different from the character she is reading about in the text. Visual realism fails because of technological limitations, and the responsibility for recognizing the class-based otherness of Baen and the not-of-this-world otherness of O is left to the text. But this failure becomes something of a strength; loosened from the possibility of matching an imperfect game engine, the game writers are free to write in ways that can compensate for that loss, such as use of metaphor that would be harder to convey visually. While the latest technology may be able to render Baen, creating an O worthy of his description would be a very intensive task to demand of a graphic designer. Instead, because such a match is far beyond their reach, the writers can refer to "slivers of eternity" and other such literary metaphors to construct a gameworld beyond simple visual articulation. It then is left up to the player to decide if such a game of mimesis is one worth playing with—or believing in.

Tattoos: Inscribe your self, improve your stats

"No wonder my back hurts; there's a damn novel written there."

--The Nameless One

If the character descriptions illustrate the gap between image and text, the way *Planescape: Torment* incorporates tattoos illustrates the way the two can become tangled, as inscriptions on the player-character's body progress the story, mark him as different, and change how the Nameless One functions in the game at large. It is common to think of tattoos as a type of image first and foremost. In *Tattoos in American Visual Culture*, for example, Mindy Fenske considers tattoos in terms of the combined "visual image" they make out of the body as a whole (2). As such, she argues, they should be considered how they visually play out on the body as a whole. Her point is well-taken; the context, the site, of the tattoo, is important for realizing the discursive structures a tattoo is contained in and contains. But in *Planescape*: Torment, considering that context means considering how the tattoos function as text as well, and it begins moments after the game starts. As soon as the PC wakes up, Morte helpfully reads out the instructions tattooed on The Nameless One's back, which amount to "you need to CENTER yourself" and "Do what I tell you: READ the journal, then FIND Pharod." From the beginning, then, an association is established in the player's mind between the PC's identity and the tattoos on the character's body.

While other characters in the game are also described as being tattooed, the real significance of such markings does not arise again until the PC has made her way to Fell's Tattoo Parlor in the Hive. Fell himself is a useful example of *P:T*'s approach to language. He is a dabus, a race of mute green creatures with white hair and goat horns that serve the Lady of

Pain (Sigil's patron deity) by acting as the street cleaners of Sigil. Fell has defied her in order to claim an individual identity and set up his own shop, which is frequented only by those brave enough to risk her displeasure through associating with him. Unlike the rest of his kind, he does not float above the ground, and instead, as his name reflects, walks upon it. But like all dabus, Fell cannot speak—or rather, he can speak only in rebuses, symbols that appear atop his heads. If the PC has a sufficiently high intelligence score, she may interpret the rebuses; she may also ask other party members for a translation. The visual appearance of the rebuses from a typical dabus are never more than random ASCII symbols; for Fell, there is no visual at all, only a description of the rebuses and their translation. Here is the response if the Nameless One asks Fell to explain the tattoos on the PC's body, with TNO's translation of the symbols appearing as they do on the screen, in parentheses:

Fell – Fell nods, symbols appearing around him like fireflies. (The ones upon your back were scribed with a careful hand and are directions for a mind that forgets itself. The symbol that lies upon your left shoulder is the mark of torment.)

Nameless One – "Torment?"

Fell – The symbol sharpens, gaining edges that are almost painful to your eyes.⁵⁷ (It is *torment*. It is that which drives all tormented souls to you.) Fell nods at your left arm, at your shoulder. (The flesh knows it suffers even when the mind has forgotten. And so you wear the rune always.)

Like with the NPC stock images and the Art House, verbal description takes over when visual

These translations have varying degrees of accuracy; in fact, one of the game's subquests will only trigger if the player-character realizes one of the party members. Dak'kon, is lying about his translation of Fell's rebuses.

This second person narration is common to CRPGs of this period; see also *Fallout*, *Baldur's Gate*. It is even common, as in this example, to use second person narration mixed with another character's speech, despite the potential for confusion.

representation is not capable of presenting what is required; with Fell in particular, the exact rebuses matter less than the formations he has them perform, actions that would be very taxing, if not impossible, for the Infinity Engine. The passage is also an example of some of the many ways in which *Planescape: Torment* represents otherness in text—a subject that will be discussed in more detail in the next section—in this case, placing an emphasis on torment through the use of the asterisks, and placing an emphasis on all of Fell's speech by encasing it in parentheses rather than quotation marks, marking him out as an unusual being.

Beyond the form of the conversation, the content is also significant, for a number of reasons, all of which speak to the game's main themes. It hints that the other party members have been drawn to the Nameless One against their will by virtue of the Torment rune, a point that will be expanded on first by Ravel, interrogating the Nameless One on his relation to the others, and later by the Transcendent One, challenging each of them to abandon the Nameless One and save their own lives. It is also, as Ravel will reveal, a key factor in creating the Nameless One's immortality. Most relevant to the topic at hand, however, is that Fell claims, "The flesh knows it suffers even when the mind has forgotten." Combined with his earlier statement that the tattoos on the back are "directions for a mind that forgets itself," it points to one of the main functions of tattoos in *Planescape: Torment*: as place-holder and record-keeper for personal identity.

A common argument for the purpose of tattoos is that they are about declaring difference, that "Choosing to be a physical deviant symbolically demonstrates one's disregard for the prevailing norms" (Danders and Vail 1). In *Planescape: Torment*, the case is somewhat different but still analogous, as the tattoos marking the Nameless One are part of the many

signs that he is unusual and exceptional,⁵⁸ much as the descriptions of O and Baen marked them as unusual, although, likewise, the tattoos are not visible in the main screen of the game. But on the subject of tattoos in terms of consumer culture and identity, Patterson and Schroeder argue that the tattoo is more complicated than just expressing deviation of norms, that they serve a number of purposes: tattoos move between dualisms that mark boundaries, in that they are a sign of permanence against the plasticity of modern life; they are personal to the individual but indicate membership as part of the tattooed class; they are both public and private, both mainstream and transgressive; finally stories regarding a tattoo circulate between personalized meanings and accounts of the reactions of others.

The meaning of a tattoo, in terms of permanence, boundaries, and class change once again when put into the context of *Planescape: Torment*, where they are inscribed on an amnesiac immortal whose mind is faulty and whose body can discard and dismiss parts that are no longer of use. *Planescape: Torment*'s inventory screen somewhat reverses typical RPG conventions by allowing body parts such as the eye and alterations such as tattoos that are most often permanent to be exchanged at will, as a consequence of the Nameless One's immortality and quasi-undead state. Consequently, the idea that tattoos preserve permanence does not hold true in the context of the game. But at the same time, the stories and personalized meanings of the tattoos hold all the more. A new tattoo is available only from Fell—meaning that every purchase of a tattoo involves reminding players of the connection between language and moving symbols—and only after the PC has uncovered a specific memory, been through a specific event, or acquired a new teammate. Each tattoo has an icon and a description, and the

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⁵⁸ His scars serve in a similar fashion, causing characters who have just met him to address him as "death's dearest son" and "scar cloak."

description of the tattoo becomes a representation of that landmark event or character in the game. The Tattoo of Wasting Darkness, with an icon showing symmetrical curves above a symmetrically divided ground, serves as memory of an event the PC never experiences, but happened to the Nameless One prior to the start of the game, as it "tells of the experiences of one our past incarnations... the symbols and tales are unfamiliar to you, but it seems to tell of a time when you were seeking shelter beneath the catacombs and were forced to live as a shadow might." The Tattoo of Ravel's Kiss, on the other hand, reflects a specific decision the player made; its icon is a pair of red lips, and the player is told, "This tattoo is blood red, and reminds you of the blood that Ravel drew when your lips touched hers. It may not have been the wisest decision, but it took tremendous bravery and strength to kiss her." In this way, the tattoos serve as a sort of supplement to the game's journal function, documenting the choices and deeds accomplished by the protagonist. The tattoos serve as a public deviation from the norm by recording and displaying the extraordinary feats performed by the player.

However, the tattoos also perform an additional function that the journal does not.

Being equippable items, the tattoos are more than just aesthetic gloss; the statistics governing the character change depending on which tattoos are equipped. Following terminology coined by Steven Conway, the tattoos can be both hyper-ludic—enhancing the player's capabilities—and contra-ludic—diminishing the player's capabilities—often, both at the same time (17). The Tattoo of Wasting Darkness can be invoked to create a one-time experience and stealth bonus, and when equipped grants +1 to armour class and +5% to stealth, but -1 charisma, reflecting that it was inspired by a memory of a time when the Nameless One was skilled in skulking, but engaged in corpse-pilfering activities generally regarded as despicable; the Tattoo of Ravel's

Kiss is -1 to Wisdom, -1 to Intelligence, +2 to Strength, +2 to Constitution, and +1 to Save vs. Paralyzation, reflecting that the event that inspired it was brave but also foolhardy. That the tattoos have this power to imbue traits unto the body they are inscribed on is part of P:T's gameworld, that it is fictionally true in P:T that sigils and symbols directly retain the power of what they represent—especially when inscribed by a being such as Fell. In this way, the preservation of memory, the player tendency to maximize character efficiency, the statistic-based nature of the RPG, the story of the text, and the inscription of identity are all bound together in the procurement of tattoos in Fell's Tattoo Parlor.

In Dialogue with Planescape: Torment

While *P:T*'s main interface is relatively devoid of text by default, the situation changes quite considerably when the characters start talking. There are three forms of conversation represented in *Planescape: Torment*: speech, screen text, and dialogue text. As was common of many videogames from the mid-90s onward, *Planescape:Torment* contains digitized speech, in which voice actors deliver character lines. The cost in terms of memory space and employing the actors (and, especially later, when such animation was possible, the cost and time of animating the characters) places restrictions on how much speech can be easily inserted into a given game. P:T's solution to this problem is to minimize the use of speech, so that it only appears in short single-sentence bursts: player-characters responding to commands such as "attack"; indicating state-changes such as being severely hurt in combat; and brief but significant utterances that are part of longer conversations. As an example, take Morte, a team member who also happens to be an undead floating skull. When instructed to move, he may utter "okay," "why not?" or "As good as done." When he misses in combat, he swears "Dammit." And when the player encounters him for the first time, he speaks his first lines (and only the first few lines): "Hey chief. You okay? You playing corpse or you putting blinds on the Dusties? I thought you were a deader for sure."

All of these examples do not provide any necessary information that will not be supplied through other means. Morte's movement serves to demonstrate he understood the player's command, the lack of damage to the enemy shows that the attack missed, and the text of his speech is displayed on the screen before Morte finishes saying it. Rather, the point of including speech is to reinforce the information that is already there, and supplement the

player's bank of fictional propositions regarding Morte. It reinforces the personality the game has established for Morte, conveying a sense of flippancy through tone and wording. The same holds for the speech functions of the party members, who will often utter a quick phrase if the player goes for a minute or so without making any command. More broadly, the game uses speech as a marker of significance for characters and events. If a character speaks, rather than just having the words displayed, it is a sign that the character is an important one. And dialogue that is both spoken and displayed on screen, is meant to be particularly significant. In the quotation used above, Morte's speech is not just an introduction to the character, but an introduction to the entire gameworld, which is why it is so heavy with gameworld jargon-"deader," "Dusties," "putting the blinds." For economic and technological reasons, *Planescape: Torment*, like most games of its time, had to limit the use of speech, and thus used speech to carry a significance it would not otherwise have carried.

Speech in *P:T* is used as a marker of temporary difference, but it is not the only way temporary talking appears in the game. What I call bark text—so called because of its similar function to "barks," the accepted term for brief gameworld character chatter in response to the PC's actions or presence (Hamilton) —appears only in the main display rather than the dialogue box where conversation happens, and is always localized and temporary. It is localized because it always pertains directly and only to something in the area surrounding it, and temporary because it will disappear after a moment, in contrast to the dialogue that appears in the HUD. Bark text can take a variety of forms. It can act as status indicator, often appearing alongside speech, or verbal barks. When the Nameless One gets a level up, for example, he says "I feel stronger" and the phrase "Level Up" briefly rises, floating upward a few seconds

then vanishing. Likewise, the player can choose how much information is presented during combat, to the point where a constant stream of text drifts upwards relaying the result of every attempted swing, vanishing to make room for the next in the queue. When the PC moves the cursor onto certain objects that can only be seen and not otherwise interacted with, the cursor transforms into a question mark and the player receives a brief description, such as "Vines with black leaves. The stems look extremely sharp," the description for certain overgrown plant life in the northwest section of the Hive. This text remains fixed in place for a few moments, and disappears.

There is also bark text associated with NPCs. When the cursor is placed on a character rather than an object (a distinction which is not always clear, as the Art Store that will be discussed later demonstrates), their name appears in text above them, and the cursor transforms into a cartoon word box—and this notification, like speech, indicates which characters are significant, as those with a given name have unique dialogue options, whereas those with a generic title such as "Thug" tend to give generic responses. This text remains as long as the cursor stays on the character. Finally, there is the most complex case, when the text that appears above a character's head corresponds to speech that is attributable to that character. For example, a Collector—a person who makes money by finding dead bodies and trading them to interested buyers—named Mhut cycles through a few different phrases, including "Deaders? Where ye be?" "Maybe some Deaders down 'ere?" (which does not appear to be locationally triggered), and "Doesn't anyone *die* in this city any more?". Like the game's use of speech, what the characters say is never crucial to the player's success, but it does build on the personality and temperament of the character, adding to what is to be gleaned from conversing

with them properly. It also serves as another marker of significance, as the player's attention is drawn towards the characters. Arguably, there is also a mimetic purpose served. Because the text appears in the world screen rather than the player's dialogue box, it makes the game appear as more of a simulation, in that these characters are conversing and interacting with the world around them seemingly independent of the player's presence.

Finally, as all these different streams of information can be confusing and even overwhelming, the various types of bark text utilize a colour coded system, as with *DOOM*. 59 Status-changing indicators are in white, as are combat indicators; the exception is damage inflicted on the party members, which is represented in red. In all cases, the text floats upward briefly before fading, to emphasize their roles as temporary indicators. When the game pauses, the pause indicator appears in green, as it does in object descriptions; one explanation for this colour-sharing could be that both involve text describing a moment, whether a moment of apprehension, or a frozen moment. Last, dialogue-based bark text appears in a shade of light blue, as well as occasionally purple if from a party member. In this manner, the game's designers take care to code and distinguish the strands of information confronting the player, to suggest how a particular statement should be fictionally evaluated.

The bark text and speech enjoy some independence from the dialogue interface and internal portion of the interface. But because both are temporary and ultimately supply non-consequential information or build on information presented in other ways, their fleeting presence in comparison to the timeless nature of the dialogue box suggests that it is the dialogue box which is meant to be regarded as the primary attractor of the player's attention. Its

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Unlike *DOOM*, this system is only generally consistent; within the thousands and thousands of displays, the bark text in particular tends to vary outside of the parameters described.

size also reinforces this significance; when the player initiates a dialogue, the lower interface swells to take up three-fifths of the screen, dwarfing the world screen for as long as it is in place. Most dialogues follow the same pattern: the player initiates conversation, the dialogue box rises, and there is a text description of the character (especially the first time the player speaks with them), followed by some statement from the character. The player can then choose from a list of responses, with the options made available based on a variety of factors not made directly known to the player, including PC intelligence level, whether she has a particular item, and so forth, and the choice of response in turn prompts a response from the character. The exchange goes back and forth until one or the other ends it (usually the player, but occasionally the character, in response to the player), and the dialogue box folds back into the lower interface. It is through this dialogue box that most of the game's vaunted 800 000 words make their appearance, and its design warrants further analysis.

One notable aspect of the dialogue box is that conversations are divided into digestible chunks to fit its size. While there is a "Click for More" button, it tends to only be needed in special circumstances: when the player has more options for response than be viewed within the constraints of a single dialogue box, when a description lasts more than a dialogue box, or when the dialogue involves conversations between two or more NPCs, in which case the button is used to create a pause between one character's dialogue and the next. Instead, most dialogue in the game is crafted so that there is room for both the character's speech and the player's possible response. When the character's speech is too long to appear in a single box all at once, the player has the option to inject, usually with some innocuous phrase such as "And then...?". Calling this prompt an option is not strictly accurate; it is, in fact, a non-optional choice, as the

player has no other choice but to accept this interjection to continue the conversation. Such prompting could easily have been replaced by the "Click for More" button, but by prompting the player to contribute in order to advance the conversation, *Planescape: Torment* preserves at least the illusion that conversation is unfolding in a realistic manner. In this way, it attempts to balance natural-seeming dialogue with the restrictions enforced by a set dialogue box size—a problem common to dialogue-heavy games of the time.⁶⁰

Like the head text, the dialogue options are carefully colour-coded, and again, the reason seems to be so that the player can more easily digest the information the game provides. Description and the speech of others appears as light grey font on the dark grey background. The choice of response for the PC appear in a red text, and numbered with light blue numbers; if there are ten or fewer choices, the player may select them using the appropriate number on the keyboard (0 for 10). Otherwise, the player must select using the cursor, and when a response is highlighted, the red text turns white. Once selected, the text turns blue, the numbers and options disappear, and the text scrolls upward to reveal the NPC's response and the next set of player responses. At any time during the conversation (except for when the "Click for More" button is present), the player may scroll the dialogue box upwards to review what has been said, but the options not chosen are not present. The effacing of previous options focuses the player on the present moment, and reinforces the notion that the choices matter—a key notion, given the nature of the game's central plot.

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Games that were later imported to foreign markets faced an extra challenge in this regard, in that they had to contend with not only accurately translating dialogue, but translating it so that it fit within the spaces that were already set, a common issue in 1990s role-playing console games from Japan localized for North America.

The Text of Talk

One aspect of speech that was not covered in the previous section is accent. Just as the tattoo signals a deviation from the "normal" body, in fictionalized media, the accent is also often put to use as a sign of otherness. While speech in videogames is not by any means uncommon, it tends to follow similar functions as in film and television; contemporary game scholarship trends, in turn, tend to emphasize aspects of videogames that differentiate them from other media forms, and so the utilization of speech has been somewhat understudied. An exception is Astrid Ensslin's work, looking at how, in particular, Standard North American (SNAm) and British Received Pronunciation (RP, or the Queen's English) are used as markers of authority and wisdom in games such as Return to Wolfenstein, Fable: The Lost Chapters, Black and White 2, and Wizard 101 ("Recallin' Fagan"). While her examination of each game is fairly brief, her conclusion is that "Standard British and North American as well as nonstandard regional and foreign accents are used in combination with other semiotic modes and paralinguistic features (such as pitch and intonation) to construct and maintain dominant language attitudes towards varieties of global English"; that is, the accents function as short forms to align the players with the Manichean moral binaries of good and evil operating in the games she examines (225-6).

The speech in *Planescape: Torment* follows roughly the same patterns. The Nameless One, as the point of view character, is largely unmarked, speaking in a typical SNAm accent. All of the other party members have marked accents. The tiefling Annah speaks, somewhat inexplicably, with a thick Scottish brogue, whereas the succubus Fall-from-Grace speaks in a RP, which matches their characterizations of being street-smart, highly emotional, and lower

class, and of being upper-class, well-studied, and carefully mannered, respectively. *P:T*'s role as a text-heavy variant, however, means that, most dialogue not heard but read. As such, the issue here is how text marks difference in the game, in terms of the gameworld as a whole and the foreign, if not outright alien, nature of the characters.

Alongside mention of the sheer volume of words in the game, another common talking point (pun intended) for discussions of *Planescape: Torment* is the vocabulary at work in Sigil, as the game draws heavily from old east London cant (Adams, Grilliopoulous). Thus, it is typical for characters to use "jink" to refer to money, and "berk" as a pejorative, short for Berkley Hunt, which is Cockney rhyming slang for the vulgarity "cunt." The early portions of *P:T*—starting with the first words of the game, Morte's earlier quoted "Hey chief. You okay? You playing corpse or you putting blinds on the Dusties? I thought you were a deader for sure"-rely heavily on the slang, as well as on phrases unique to Sigil, such as "Dusties," whereas later areas of the game, such as the high class Upper Wards, tend to rely on what may be characterized as more colloquial speech. In part, this shift fits within the historical context the game is drawing on, as the slums of the Hive fit with the social-economic status of those who would be using the old east London speech patterns. Unfortunately, such use makes it relatively easy to compartmentalize the lower classed citizens of Sigil as "others" and the upper class as comparatively "normal."

An alternative explanation is that these patterns conform with Ensslin's other observation, based on *Fable: The Lost Chapter* and *Wizardry 101* that the early sections of a videogame, especially tutorial areas, tend to have speech patterns different from the rest of the game ("Recallin' Fagan). Ensslin argues that speech patterns point to Manichean binaries that

are more pronounced in these stages of a game "because the convenience of pigeon-holing and straightforward othering helps to channel players' concentration onto motoric and cybernetic interaction with the game rather than triggering critical reflection and debate" (233); that is, at this stage of the game, the player is more likely to be focused on learning how to physically play the game than on navigating a dense gameworld history. The twist with *Planescape:*Torment is that navigating that dense history is the brunt of learning how to physically play the game. Consequently, the early stages of the game—the Hive, the Mortuary—rely more heavily on the slang in order to immerse the player into *Planescape: Torment*'s larger language structures and concepts, to cement certain fictional truths in her conception of the playworld.

Finally, the use of cockney slang speaks to *Planescape: Torment*'s status as a variant among RPG types. Though the slang is employed in the game's vision statement, it is never directly addressed. Still, it fits well within the statement's parameters, which is explicit in telling the designers "don't do what's been done" and that "this is Planescape, not high fantasy" (16). In other words, *Dungeons & Dragons* specifically, and the fantasy genre in general, draws heavily on Tolkien-created tropes, which in turn took their cues from medieval Europe and Old English (or at least, with many fantasies, what is popularly believed to be from medieval Europe and Old English). As such, these works take on the pseudo-linguistic traits of the era from which they borrow. By borrowing instead from 19th century England, *P:T* once again differentiates itself as a variant different from other similar games, and in the process allows access to more modern concepts, such as the commodification of death (through the Dustmen faction), industrialization and anarchy (through the Godsmen quest lines), and bureaucracy and specialized education (as illustrated through Higher Ward professions such as barrister and

linguist). Through the use of an unusual (for videogames) dialect, one represented largely in text rather than spoken word, *Planescape: Torment* emphasizes its own position as a unique, or at least very unusual, RPG.

Even within this framework, individual characters can still be established as other from Sigil's normal population through markers in their dialogue text. Here is a sample of four different types of marked speech text in *P:T*:

- 1) "This one wears a shirt of scars and blood, and he travels with a traitor. Vilquar's heart beats within your chest if you ask if I will hear him." "Will you close your mind to his words? *Know* your words before you speak your mind, Kii'na, *zerth* of Zerthimon."
- 2) "I don't zhink zhere's anyzhing to enjoy here, two-legs. Perhaps you should look elsewhere, in anozher vord."
- 3) BEYOND THIS TOWER, ORDER RALLIES ITS LEGIONS. THE

 MULTIVERSE HEALS ITS WOUNDS. IN TIME, ITS STRENGTH MAY

 EQUAL ENTROPY.
- 4) "Long have I ssslept... dreamssss of flamesss..." "I am yourssss... 'till death comessss for ussss both..."

Example 1 is an exchange between Dak'kon and Kii'na, both members of a species called the githzerai, people from a plane known as Limbo where reality is shaped directly by belief.

Consequently, they place great importance on understanding a concept thoroughly, and using metaphor that relates directly back to their people's history in order to reinforce their major cultural beliefs. Both of these traits are in play here, through the use of * to mark emphasis on

knowing and the state of zerth (which refers to be being a devout believer in the teachings of their spiritual leader, Zerthimon), and in the reference to Vilquar, a traitor in githzerai history. Example 2 is from an unnamed bariaur, a half-man, half-goat, and demonstrates the simple use of alternative spelling to convey accent; additionally, referring to the Nameless One constantly as "two-legs" also reinforces the bariaur's difference. Example 3 is from Coaxmetal, a massive iron golem so immense that it does not fit within a single screen. Here, as with other largerthan-life characters, such as the Stone Face in the Weeping Stone Catacombs and The Transcendent One at the game's end, speaking in all-caps reinforces the character's unusually large size. A subtler effect is that Coaxmetal is one of the few characters who do not have quotation marks around their speech, suggesting that its speech emanates in an unspecified way that differs from normal voice projection. Last, example 4 comes from Ignus, a mad sorcerer who has been transformed into a living conduit of Fire; the hissing sense created by the multiple s's simulates smouldering flame, and the frequent pauses point to his state as a creature who processes things differently than normal beings. With the possible exception of the first example, all of these textual markings could be found more or less commonly in fiction. The point is not that they are unique, but that they illustrate the rich possibilities of indicating otherness through text in such a way that the marking informs the player of the character's respective identity.

Ending the set of examples with Ignus was a deliberate choice, as he illustrates another broad category of othering through speech that is common in *Planescape:Torment*: using speech to mark out the mentally different, or the outright insane. Frequently, throughout the game, the speech of characters whose mental state the player is to understand as deviant is

marked through some form of textually-indicated speech impediment. Ingus, as demonstrated, speaks in slow bursts, with a lisp. Ingress, a woman driven mad through accidental contact with Lovecraft-like planes speaks in odd syntax with clipped words: "Y'want me t'leave? NOT leaving this city, so I'm not. I can't, tried, it's not a city, it's a prison t'everywhere." Barking-Wilder, member of the Chaos Men, a group focused on developing irrational behaviour, responds to enquiries with nonsensical phrases: "Answers split with half-blue's oil! KNOW! Self your quest shun!". But the character who best illustrates the affordances of representing madness in speech through text is Ravel Puzzlewell, the witch holding the secret to the Nameless One's immortality.

The confrontation with Ravel inevitably ends in a battle against her, but the player can also have an extensive discussion beforehand. Extensive, in fact, is an understatement; designer Chris Avellone has released Black Isle's scripts on the encounter with Ravel, both the first draft and the final, and the latter document is 125 pages long. The first draft notes that she is crazy, which "manifests itself in her bent speech" (1), and lists several potential markers for her speech, including alliteration, future tense, a Russian accent and Russian expressions, misused homonyms ("similar to the constable in *Much Ado About Nothing*") and "a lot of pseudomystical magical new-age bullshit" (4). In practice, while only some of these tics make it to the final draft, Ravel's speech does show an unusually large number of markers, even by *Planescape: Torment*'s standards:

1) "I scattered clues like caltrops, and these were my means of a-guiding you to my garden. I a-feared it was YOU who had forgot *I*" (6).

This particular marker is not uncommon in videogames, and can in fact be deployed to humorous effect; the insane non sequiturs spouted by the Malkavian vampires of the 2004 *Vampire: The Masquerade—Bloodlines* are often cited as players' favorite part of the game.

- "these things, a-dangerous were in such a fragile vessel, no matter how strong a mortal man. Regret them and the ritual do I" (56).
- 2) "There is NOTHING that is beyond me, foolish man! NOTHING!" (9).

 "You LIE! Do not DARE lie to me, when your heart is a BOOK to me! Every word you SPIT *screams* of your torment!" (17-18).
- 3) "I know not... knot? Knot the nature nor the cause of these hungers" (14). "I am but a *woman* who has sorely... soarly? Soarly missed her beloved creation" (68).
 - "Lead is not easily a-changed to gold, but it possible, thought the unwise... unwhys? ... Ravel. If water can be drawn from blood, mortality can be taken from a mortal, peeled back like a sticky film..."(54).
 - "You have a whole where... wear? Wear your mortality once lay within your shell" (57).

Each of the categories above demonstrate some of the markers for insanity in Ravel's speech. Option 1, besides the use of asterisks as emphasis, establishes Ravel's character as eccentric through the affixing of the prefix "a-," and the unusual syntax of the second quotation in the category does the same. Further, the simile in the first quotation is striking (and perhaps a hint of the alliteration that Avellone suggests in the first draft of the design document), comparing clues Ravel left leading the PC towards her to spiked traps designed to impede one's passage, suggesting that Ravel sees a similarity between information and the potential to do harm. The second pair of quotations in Option 2 illustrate a different use of all caps font; rather than showing the immensity of the character speaking, in this case, it is meant to signal an intensity

more passionate than that marked by asterisks, suggesting that Ravel is subject to sudden and violent mood swings. Together, the two sets mark Ravel as a being who vacillates dangerously between emotional extremes, textual markers reinforcing the action of the conversation.

But for the purposes of a text-oriented analysis of *Planescape: Torment*, it is the set of quotations in Option 3 that are the most significant. Each quotation illustrates a moment where Ravel is confused about which homonym is being employed. In each case, the word Ravel refers to in confusion has some at least tangential meaning in the conversation. "Knot," for example, can refer to both the tangled mess that Ravel has made of her own mind and to the knot of a tree; it is suggested that there is something like a tree in Ravel's physiology, as one of the optional courses of the conversation finds her absently snapping off a piece of her hair as if it was a twig. And while it is somewhat speculative, "un-whys" could be viewed as the Nameless One himself, whose unwise loss of his mortality left him without his memory—in effect, removing the "whys" behind his own being. Moreover, there is a crucial difference between Ravel's slips and those of the "constable" Avellone models her on; Dogberry's malapropisms are noticeable in speech based on the context of the sentence they appear in (a necessary step, given they were written to be performed). Ravel's homonyms, generally, have no such contextual references; the only way to tell she has made a mistake is that the word is spelled differently. In other words—literally, through the use of other words—Ravel's confused mental state is illustrated through a textual element that requires her speech to be rendered in text in order for the markers to be appreciated.

As Ensslin notes, the spoken word is hardly an element unique to videogames; nor, obviously, is speech represented by text. As a medium, the videogame is fundamentally a

multimedia platform, capable of incorporating other forms into its own design. Consequently, what needs to be examined is how *Planescape: Torment* incorporates and adapts existing conventions regarding the display of speech. In sum, the game uses a multitude of markers to designate various characters and the game itself as unusual, as other. The adoption of London-based slang is a deliberate deviation from the stilted language common to fantasy-based fiction. Unusual characters are attributed with a wide variety of textual markings, from ALL CAPS PHRASES to *emphasis* created by other means. One of the game's major characters, Ravel Puzzlewell, becomes a virtuoso example of otherness through the multiple markers used in her portrayal, including the homonym marker specific to a text-based portrayal. In a game where words are used as much as images to establish the fantasy world, the marked text of *Planescape: Torment* illustrates the versatility available for creating an elaborate fictional gameworld with a text-heavy interface.

Identity and Text: Journals as Self

"It is difficult to communicate a life with words."

-- The Good Incarnation

The significance of journals in *Planescape: Torment* cannot be overstated. In *Iconology*, W. J. T. Mitchell coined the term "hypericon" to refer to the way we can "see ideas as images," including the way "images (and ideas) double themselves: the way we depict the act of picturing, imagine the activity of imagination, figure the practice of figuration" (5). If the term was not already in use, the use of "journal" in P:T could then arguably be called a "hypertext," in the sense that it is an "idea as a single word," deployed over and over to represent the idea in the game that identity can be embedded in text, and arise out of it. It is one of the most obvious points of intersection between the game's interface and its larger plot. Every significant conversation or event in the game is flagged on-screen by a notification reading "Journal Updated," which informs the player the event has been recorded in the journal submenu. Further, the journal submenu contains a submenu of its own also labelled journal—a rather confusing nomenclature, but one that suggests the game is about journals, all the way down that records a summary of these events, shaped through a narrative lens that is supposedly TNO's voice, further establishing how these events should be interpreted. And the rest of the journal submenu contains information on important characters, monsters, and species, implying that that another interpretation of what journal means in the game is the sum total of every single thing of notice that one may encounter. Perhaps stretching the term slightly, one could also describe the first-person autobiographies of the party members in the biography submenu as journals. In all of these ways, the game constantly reinforces the significance of journals to

the player.

It is no surprise, then, that the game's story foregrounds journals as well. For at least the first portion of the game, the search for missing journals is presented as the key to discovering the Nameless One's forgotten identity. While the player is searching for Pharod in the initial stages of the game, she is also often given the option to ask several NPCs in the Hive area on whether they have seen it. Their answers vary greatly, as illustrated in these three samples:

- 1) "You know, it's a good idea, it is. ... a journal. Mayhap I should start one myself."
- 2) "A journal? Oh sure. I've kept an eye out for all stray journals. Just in case some scarred man walks into my favourite bar and starts asking about it. Do you ask that of everyone you meet? What a fascinating life."
- 3) "I sympathize with your plight. Journals are the very essence of our identity.

 They keep us aware of our past and help us plot our future paths. I always keep a journal myself, and I find I am a much better person because of it."

The first example is the basic case; it provides a response in accordance to the personality of the character asked and occasionally, as in this instance, reinforces the general idea that journals are important; on that level, simply having the option to ask for the journal reinforces its significance, regardless of any particular answer. The second example performs a lampshading function; that is, it draws attention to the artificiality inherent in granting the Nameless One the option to interrogate complete strangers about the whereabouts of his journal. Such devices are fairly common in certain types of fiction—common enough, at any rate, for the term "lampshading" to exist in the first place. Example 3, on the other hand, is an

overt statement speaking directly to how the player is to interpret journals in the game: as a connection to the past, in terms of the search for the missing journals; as a connection to the future through the journal's recording of the player's actions and experiences within the game; and, in short, as the "very essence" of identity.

Given this purported prominence of journals, then, it may come as a surprise that the search for missing journals ends abruptly about halfway through the game, once TNO meets Pharod, and before any of the journals actually being found. I would argue, however, that this cessation is not because the journal has become unimportant but that it occurs for the same reason *Planescape: Torment* de-emphasizes the London slang in the latter stages of the game; by making the journals so prominent in the game's early stages, the designers are assured that the journal will remain prominent in the player's mind, and can let it lapse somewhat—though it is never gone entirely, as the journal portions of the interface remain as prominent as ever.

Further, while the option to query characters about the location of journals disappears in later stages of the game, it is at this point that the journals are actually found, and the nature of the found journals complicate the established connections between text, journal, and identity. The "bone-framed journal" was written by a past incarnation of TNO who was long trapped in a maze; the journal was made out of TNO's own skin and bones, cut from him and stitched together to give a raving account of his time stuck in the maze. Another journal of sorts plays out on the walls of a tomb built as a trap by other past incarnations, and describes their separate efforts to confront the shadows that have been plaguing them. The same incarnation—called the Paranoid Incarnation in the game—created the dodecahedron, a journal twisted into that odd shape that is "thrice-trapped" with various poisons and also written in the "lost language of

the Uyo," which he learned from the last known speaker (a linguist specializing in lost languages), then murdered to preserve his secrets. ⁶² Finally, a bronze sphere with a complicated history—a past incarnation charged Pharod to retrieve it, then Pharod forces TNO to retrieve it for him—turns out to be a sensory stone, a stone embedded with someone's memory that can be experienced through touch. This particular sensory stone contains memories of the first incarnation of the Nameless One, making it into a journal by way of being the only remaining record of his originary existence and motivations. What all of these bizarre objects have in common is that they all contain records, and the information contained on these records are conveyed to the player via text—in fact, with the exception of the bronze sphere, they are all composed of text as well. The early sections of *Planescape: Torment* establish that the significance of the journals' existence, that a written record of one's experiences is a formative, even essential, indicator of identity. By transposing the media of the journals across so many different types, the latter portions of the game play to the game's signature strangeness, but ultimately reinforce the idea that material records and texts are a vital part of an individual's personal history and a vital part of the playworld the player constructs.

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In other of the game's nods to the connection between language and identity, at one point in the game, former incarnations of TNO are personified, including the Paranoid Incarnation. If the player knows the lost language of Uyo and addresses the Paranoid Incarnation in it, it is possible to convince him that the two of you are the same person and that he should willingly merge with TNO so that his memories can be incorporated into him. In short, to the Paranoid Incarnation, knowledge of this language is sufficient to constitute a unique identity.

Names and Riddles: The Role of Text in the End of Planescape: Torment

All of P:T's focus on identity culminates in two figures, both of which are text based and potentially resolved at the game's end, depending on the player's choices—but those resolutions are mutually exclusive. The first figure is the name. In the fantasy genre, there is a history of assigning unusual power to names, as demonstrated in such diverse works as the eponymous figure of "Rumpelstiltskin," the name-based magic system of Ursula Le Guin's Earthsea series, and "He-Who-Must-Not-Be-Named" in the Harry Potter series. As Fernandes notes in a study on name translation in children's fantasy literature, it is common for names to be chosen so that they "describe a certain quality of a particular narrative element and/or create some comic effects" (46), and both tendencies are prominent in *Planescape:Torment*. Just among the game's party members, there is Morte, an obvious pun for a character who is a floating skull; Ignus, whose Latin roots suggest his status as a living conduit of fire; Fall-From-Grace, a succubus disenfranchised from rest of her kind; and Nordrom, a mechanical construct named by TNO (although the PC has no choice in the name) after learning that Nordom is a reverse of a regular creature of his kind, the mordons. In addition, the game's NPC ranks include many other examples, including the corpse collector Sharegrave, aforementioned lunatic Barking Wilder, the smelly story-teller Reekwind, and nail collector Iron Nalls, who gained the moniker "Iron" from her occupation. For these characters, their names are a reflection of their identity.

Furthermore, as with the journals, the game goes out of its way to indicate the significance and power of names, as numerous examples may attest. Reekwind is not its bearer's original name; that name was discovered by a wizard who used it to magically reduce

him into a stinking, hideous beggar. Reekwind summarizes the moral of his case: "Keep your name secret, keep it close, never let it out. ...Names are like smells... things can track you with them. ... If someone knows a true name, it gives them power. ... The power to *hurt*." In another instance, a character labelled "Nameless Zombie" charges the PC to rediscover her name, as she has forgotten it and feels incomplete without it. One of the possible conclusions of the quest is the player convinces the zombie that she is not the same person as when she was alive, and thus she deserves a new name. In response, she asks TNO to choose the name, and he does so—but while the act of whispering the name to the zombie is described to the player, the actual name is not revealed. While in many cases, such distancing is often considered to be damaging to the immersive bond between player and character, here, it serves an almost Brechtian function, as the distance emphasizes Reekwind's early point: true names, those that speak to a character's being, are sacred, and should be closely guarded.

Given that significance, it is clearly important that the PC plays The Nameless One, with no option to choose any other name. In horror, it is common for the monster to be unnamed in order to suggest that such beings are not classifiable by standard categories, and there is certainly much that is monstrous about TNO's nature, particularly in the way he can remove and replace limbs, and rise again and again from the dead (Carroll 32-33). It seems more likely, however, that the primary association is meant to be that The Nameless One's lack of a name ties in to his lack of memories, and lack of personal identity. It is revealed through the course of the game that TNO in fact has many names, but they are all those that have been bestowed upon him due to his bloody past: "LOST ONE. IMMORTAL ONE.

LIFE. RESTLESS ONE. ONE OF MANY. THE ONE WHOM LIFE HOLDS PRISONER. THE BRINGER OF SHADOWS. THE WOUNDED ONE. MISERY-BRINGER. YEMETH."63 Like Reekwind and Iron Nalls, these names are clearly inspired by the traits associated with TNO, and as such, are text-based reminders of his actions, albeit actions performed before the player assumes control of him.

There is, however, a chance to uncover his original name, as the knowledge is contained in the aforementioned bronze sphere containing the first Incarnation's memories. If the player manages to fulfil certain conditions, ⁶⁴ she will be granted the option to access the sphere's contents, including the knowledge of the TNO's original name, which is granted to the character but not the player, who only receives a description of the results:: "...and it is such a *simple* thing, not at all what you thought it might be, and you feel yourself suddenly comforted. In knowing your name, your true name, you know that you have gained back perhaps the most important part of yourself. In knowing your name, you know yourself, and you know, now, there is very little you cannot do." As with the nameless zombie, the act of learning the name is described to the player, but the name itself is not. But the significance of the player knowing it is made clear in the passage, as it follows a massive experience boost (2) million points), and the assurance that "you have gained back perhaps the most important part of your self." The game leaves the exact name up to the player's fictional choice.

Further, given the nature of the *Planescape: Torment* universe, this knowledge is not

⁶³ Out of all these potential names, "YEMETH" is the most enigmatic; fan speculation has it that the name belongs to an immortal sorcerer in the gameworld who may or may not actually have been the Nameless One ("Yemeth?").

⁶⁴ The exact conditions are rather complicated and require some familiarity with the game: the player must bring the Bronze Sphere to the meeting with TNO's past Incarnations, interrogate the incarnation called the Practical Incarnation as to why he had Pharod search for the sphere, and talk the incarnation called the Good Incarnation into revealing that he is actually the First Incarnation, the original that made the bargain with Ravel.

just a comfort, but a weapon. If, during the confrontation with the Transcendent One, the player chooses the conversation options that press the Transcendent One about their true name, it responds, with some hostility, that "A NAME IS A CLOAK OF LETTERS THROWN UPON A MAN. IT MEANS NOTHING." The Nameless One then retorts that knowing this name means that he wins: "For in knowing my name, my true name, I know yours. There is nothing more you can do to me." And at this point, the player may use the power of the name to force the Transcendent One into non-existence or to merge with TNO, as she sees fit. Following the same magic that bound Reekwind, to know a being's true name (the name TNO and the Transcendent One share through common origin) is to hold power. Moreover, knowledge of the name presents one answer to the game's question of identity. The final "journal" represented by the Bronze Sphere ties up the longstanding thread of how written and verbal accounts of the past work together, providing the key to the player character's complete self.

But the game also presents another possible conclusion for identity, in the form of a riddle. Montfort argues that the figure of the riddle is well-suited for interpreting interactive fiction, because of that which they share in common: both create a systematic world that "has its own nomenclature that reflects a different sort of ordering and a different conception of the world we live in" (43); both present a problem that can only be solved "when the riddlee's interpretation is aligned with that of the riddler as represented in the riddle—and when this interpretation explains all of the descriptions consistently" (47); they ideally supply an appropriate challenge (47); and they are both "literary and puzzling" in their reliance on words (50). Under those conditions, *Planescape: Torment*, while not strictly an interactive fiction (though it does bear more than a passing resemblance to one, thanks to the second person

address and the emphasis on text), may be profitably thought of as a riddle as well: it has a systematic world governed by rules different from our own; it presents a series of problems that requires adopting the game's logic—specifically, that goals are to be found through careful investigation and conversation; it supplies an appropriate challenge; and it is literary and puzzling, in that, like interactive fiction, its writing is "intimately related to the workings of [its] world" (51), as illustrated in the ways in which everything from the character descriptions to the emphasis on journals to the verbal tics represented through text support *Planescape: Torment*'s focus on words, records, and identity.

Moreover, the game is also structured around an overt riddle. When searching for Ravel in the second phase of the game, the player may come across a story regarding Ravel's past, that she once would promise a reward to anyone who answered her riddle "What can change the nature of a man," and murder anyone who gave what she thought was an incorrect answer—and they were all incorrect answers. Upon confronting Ravel, she admits it was the Nameless One himself who posed this riddle to her, as payment for rending TNO immortal, and—it is suggested—because he sought the answer for himself, as he wanted immortality to avoid the afterlife his own nature and crimes would bring him to. When the player meets Ravel, she asks him for an answer to the riddle, foregrounding the importance of the riddle by having both characters repeat it in speech. Which of the fifteen possible answers the player chooses (sixteen possible, if the player has a Charisma of 15 or greater) has no bearing on the way the scene unfolds; if pressed on that, Ravel admits that she was only interested in finding TNO's particular answer, rather than some absolute solution: "Of COURSE your answer was the only

one I sought, for you were the ONLY reason I asked the question!" ("Ravel final draft" 51⁶⁵). Ravel's answer is instructive, in that it demonstrates that the context of a riddle—who is doing the answering, and when—has a bearing on the validity of the answer. Further, the multitude of choices all leading to same response means the validity of the answer is up to the player-character. Any of the options listed--"hatred," "power," "regret," "betrayal"--can potentially be the answer to Ravel's riddle, if the player believes it to be. Ravel's riddle is an open-ended choice where a single word allows the player to define, through text and within the boundaries of the gameworld, what TNO's choice means to her and to the character.

A single scene, however, even one introduced with considerable foreshadowing and follow-through, is not sufficient to demonstrate that the game at large is structured around this riddle. Consequently, it is the riddle's second major appearance that completes its importance, and returns us to an emphasis on text, belief, and the end of the game. In the conversation with the Transcendent One, one of the options available is to ask it what can change the nature of a man. To a player with a high enough wisdom and intelligence score, the following conversation can unfold:

The Transcendent One – THE QUESTION IS MEANINGLESS.

Nameless One – "Nonetheless, before there is an ending between us, I will hear your answer."

The Transcendent One – THEN THIS IS MY ANSWER, AND YOU ARE THE PROOF.

NOTHING CAN CHANGE THE NATURE OF A MAN.

Nameless One – "If there is anything that I have learned in my travels across the Planes,

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The final draft of the scene also refers to this portion of the conversation with Ravel as "The Ultimate Question," further illustrating its importance, to the scene if not the game as a whole.

it is that many things may change the nature of a man. Whether regret, or love, or revenge or fear – whatever you *believe* can change the nature of a man, can."

The Transcendent One – THEN YOU LEARNED A FALSE LESSON, BROKEN ONE.

Nameless One – "Have I? I've seen belief move cities, make men stave off death, and turn an evil's hag [sic] heart half-circle. Belief damned a woman, whose heart clung to the hope that another loved her when he did not. Once, it made a man seek immortality, and achieve it. And it has made a posturing spirit think it is something more than a part of me."

And at this point, the player receives the same choice as under the previous ending, to slay the Transcendent One, or merge with it. If, in the earlier scene with Ravel, the player pressed the night hag into admitting that she did not care which answer to the riddle the Nameless One provided, that player may be forgiven for concluding, like the Transcendent One, that the riddle is "MEANINGLESS," especially as any answer to Ravel achieves the same result. TNO's response, however, belies that interpretation, arguing instead that it is the belief behind the answer that matters. That the argument hinges so directly on the subject of belief will be explored in the next section, but what is immediately relevant is that TNO argues based on experience, calling up events the player has learned of or seen directly throughout the course of the game. Change, TNO argues, is not only possible, but is possible in a variety of different ways, based on what one chooses to believe, and what experiences have led to that choice. Here, identity is something to be crafted and altered, based on the changing beliefs of the person holding them. Nick Montfort's conclusion regarding the riddle is that, as interactive fiction's ancestor, it illustrates that literary and puzzling aspects (and by extension, narrative

and game) do not have to operate at cross purposes (63). Likewise, *Planescape: Torment* illustrates that playing with various forms of words, text options, and identities is not antithetical to the notion of playing a game.

To move to another apparent contradiction, the answer the Nameless One provides to the riddle, it should be noted, is somewhat opposed to the message implied by the name-based ending. That ending presents identity as originary, in that The Nameless One's original name can unify (or free him once and for all) with his misplaced mortality; it would appear to agree with the Transcendent One that "*NOTHING* CAN CHANGE THE NATURE OF A MAN," or that the question is indeed "MEANINGLESS," as true being remains with one's origin, not what one becomes. The apparent contradiction between the two does not invalidate either path; rather, it reinforces the notion that it is the holder's beliefs and experiences that decide the value of that path. Planescape: Torment does not give greater weight to either option, 66 and indeed there are other ways of resolving the impasse with the Transcendent One, including, for the player operating under a more bellicose strategy through the game, attempting to fight it (though that precludes the option to merge). *Planescape: Torment* is a game where the primary action performed by the player is choosing among text options for the option that best suits her interpretation of the Nameless One and his quest; it is only fitting, then, that the game's finale allows expression of that interpretation (within the confines of what choices can be made). In short, just as Ravel will accept any answer to the riddle as long as the Nameless One believes it to be the correct answer, the game's end demonstrates that *Planescape:Torment* will allow the

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Granted, different weights could be inferred based on the difficulty of reaching either ending, but even that reasoning is inconclusive. On the one hand, the riddle ending is more prominently displayed, which could suggest that the player was meant to be guided towards it; on the other hand, the difficulty in reaching the name ending could be an argument in its favor, as it is the greater challenge.

player to resolve it in the method she believes is most fitting, provided it aligns with the behaviour consistent with that method. To argue for what can change the nature of a man, the player must have focused on building up wisdom and intelligence when the game awarded experience points. Resolving the game through the Nameless One's true name requires clinging to the idea that the past is important, by keeping the Bronze Sphere close.

Planescape: Torment was an extremely unusual game at the time of its release—to its detriment, if the developers' subsequent reflections are any judge. It is also a highly textual game, in all the ways that have just been discussed. Its interface is brimming with textual elaboration colour-coded and formatted to convey the type of information being offered. Characters and objects are established through speech and text, to the point where the actual visual provided can be considered an ekphrastic reversal of what is being described. Otherness arises out of textual tics and deviations from standard form. Inscriptions on the PC's body, be it a scar or a tattoo, or a tattoo that serves as a scar, modify that body and record past experience; the journal, as a type of record, represents the sum of past experience and identity. Finally, the expression of character identity plays out through the way the game employs the literary figures of the name and the riddle. Its deviation from game norms derive in large part from its use of text, and in that use, it demonstrates a variant moving away from its first-person, graphic-dominant contemporaries.

Mimesis and Making Belief in Planescape: Torment

It should be evident at this point that *Planescape: Torment* is a true variant, a game against the grain of prevailing 1990s trends in game design. Contrary to popular mass media conceptions of games, it minimized the combat and violence in favour of exploration and conversation. It encouraged and expected the player to be a player-reader, synthesizing themes into a greater understanding of the game as a whole. And, most relevant to the dissertation at hand, at a time when videogames were trumpeting new graphical innovations, *P:T* adopted those innovations—it is, after all, full of cinematic cutscenes and visually lush backgrounds—but subordinated them to a secondary position and made the text the driving force of the gameworld.

What may be less immediately evident is how *P:T* relates to the topic of mimesis. If *DOOM* and *Myst* contained elements that did not fit neatly under the aegis of graphical realism, *Planescape: Torment* is even more of an awkward fit. Immortality, witches, and disembodied floating skulls described more in text than visual form all seem to belong more to the fantastic than the "mirror of the real" definition of mimesis. Mimesis as imitation fits somewhat better, in that *Planescape: Torment* is, as mentioned previously, adapted from a previous game engine and from *Dungeons and Dragons* settings. But given that so much of what is worth studying about *Planescape: Torment* is precisely how it deviates from typical game form, mimesis as imitation clearly has its limits. Mimesis as performance works well to conceptualize it, given the similarities between the space of a theatre and the space of a gameworld, in terms of establishing themselves as a space where different rules hold sway. But in its classical form, mimesis as performance relies on a clear division between audience and performers, which

does not apply in a videogame setting, so it too is pushed to its limits in describing for such a game.

Nor does it fit nicely with the other types of mimesis more directly designed videogames. The interface is mouse and keyboard, and the major actions consist of selecting choices from a list or items from a menu, none of which is easily mapped onto embodied movement, which means that mimetic interface is insufficient. In terms of conversation and the options permitted through the world screen interface, *P:T* display more functional realism than many videogames, simply by allowing the options at all. But functional realism requires there to be a real-world equivalent for the game to approximate in the first place, and the fantastic setting of the game precludes this comparison in many cases. Likewise, it is too fantastic for simulation to be a proper measure of mimesis as well—though there is an indirect connection to simulation, in that *P:T* is based on the rules of *Dungeons & Dragons*, which in turn were initially an adaptation of pen and paper wargames, simulations of real battles. But such a distant connection makes a poor framework for analysis.

Rather, *Planescape: Torment* illustrates the benefits of a different type of mimesis, one better suited not only to its text-based endeavours, but better suited for the medium of games in general. The menu screens function as props to steer the player towards particular playworld interpretations. The long text descriptions of spells, items, and characters provide facts about the gameworld that may not be known to TNO, but the player is still free to allow them to influence her actions. The stratification of text depending on colour and location on the screen guide players as how that text should affect the unfolding of their respective playworlds, whether a statement should be taken as an observation from the Nameless One's mind, or

something shouted by a member of a nearby crowd. Even the statistics screen, a set of numbers that may seem the direct antithesis to an embodied story, can be seen as props directing the player to anticipate how events will unfold; a PC with a low strength and high intelligence score, for example, may fictionally behave very differently in an imagined encounter with a group of enemies than one with the brawn to force her way through.

Much of the text, as described, performs a world-building role, in establishing elements of Sigil and the game's characters and environments in ways that the graphics available alone could not accomplish. As established, the game employs a reverse-ekphrasis, where abstract graphics present at best an approximation of more detailed textual descriptions. The descriptions of the works at the Art House and character descriptions of complex creatures such as O rely primarily on text to set up a gameworld that extends to more than the visual representations at hand. The game's tattoo system emphasizes how the body can be altered in ways that acknowledge the player's experiences in the game, reinforcing the significance of certain game events. As a result, it pushes the player to interpret the events in her playworld through that filter. The Cockney rhyming slang is never explicitly connected to real world London—and indeed, such a connection would make little to no sense in the context of the game—but it encourages the player to conceive of Sigil and its environs as a playworld that stands apart from those the player may have experienced before. Likewise, the multitude of accents, lisps, and other such speech markers encourage the player to think of *Planescape:Torment* not in terms of visual limitations of the gameworld, but in terms of the imagining such props afford. That a videogame has such an extensively described gameworld is not unusual for a videogame, especially for one that is identified with the role-playing genre.

What *Planescape: Torment* amply illustrates is that, even in the 3D graphically-immersive industry of the 1990s, there is much text can offer such world-creating.

Further, *Planescape: Torment* does not just lend itself to mimesis as make-believe; the power granted through belief is one of the central tenets behind the game. Given what has already been said about the game's story, it should come as no surprise that within this gameworld, belief plays an explicit role in shaping that world. The cities in Dak'kon's home plane of Limbo rise and fall based on the strength of its inhabitants' collective belief in their own history and purpose. As the Nameless One remarked in one of the game's endings, belief can change the nature of a man, make other men stave off death and once "made a man seek immortality and achieve it." The game is replete with many other such examples; the NPC Mourns-for-Trees attempts to convince TNO that trees will return to Sigil if enough people believe they will—an ecological theory that is probably not advisable outside of videogames. Through the administering of good deeds, the player has the option of shifting the town of Kurst into another plane of existence entirely by instilling in its citizens a sense of appreciation for order. One the more interesting examples comes out of the option the Nameless One has, at several points in the game, to lie and introduce himself to others as Adahn. If this option is chosen enough times in the course of the game, then a character named "Adahn the Imagined" will greet him, offering him some minor magical items before disappearing—though if the player chooses to tell Adahn that his existence is impossible and he is entirely made-up, he will disappear much sooner.⁶⁷ To put it in terms of Walton's fictional statements, whatever is

This instance is of a fictional (within the context of the gameworld) character becoming real through the power of belief; there is also an example of the inverse, as one of the memories the Nameless One can unlock is of a past self engaged in a philosophical debate. During the course of the debate, the past self convinces the opposing philosopher that existence is impossible, and the philosopher, much to his own surprise, promptly

fictional for *Planescape: Torment*'s gameworld is that which is true in the context of the gameworld, as it is for any representation. But one of the statements that is fictional for *P:T* is that it is true that the fictional is also the real, that whatever is sufficiently believed to be fictionally true is also actually true—within the context of the gameworld. While it is not an essential element of the plot of *Planescape: Torment*, in several instances, the game encourages the player to engage with the potential effects belief can have on reality, even if the definition of reality in question is somewhat different than that outside its gameworld.

In the end, or rather, in the many different ends the player can access in *Planescape:*Torment, the make-believe theory illustrates how a gameworld can allow appreciators multiple potential playworlds, to work more closely with the gameworld to see how the developers anticipated those choices playing out, something not possible to the same degree in most traditional print media. This degree of choice and the casting of player as protagonist leads Tavinor, in fact, to argue that in videogames, the playworld projects itself onto the gameworld (work world, in his terms), blurring the distinction between the two (57-8). In "Fiction and Fictional Worlds in Videogames," Meskin and Robin disagree vehemently with Tavinor, arguing instead that a gameworld consists of all possible decisions allowable in a game, and they further distinguish between the gameworld in toto and the world presented in an individual playthrough to address the appearance of choice that Tavinor identifies (214-215). My own stance, for *Planescape: Torment*, at least, is between these two views; there is still room for

ceases to exist.

This does not, however, hold true for all print media. Branching gamebooks, for example, from the *Choose Your Own Adventure* series to the D&D modeled *Fighting Fantasy* series also feature not only the user as protagonist, but multiple endings. It is possible to read the choices in dialogue in games like *Planescape: Torment* as roughly equivalent to the choices of a gamebook; or, looking at it from the other side, it is probably not a coincidence that gamebooks were most prominent in the 80s and early 90s, when the home computer was on the rise and the general public was becoming more proficient with algorithmic choices.

distinguishing between what is represented to the player (the gameworld) and what the player imagines (the playworld), but the scope of all information, textual or otherwise, presented to the player—the focus on belief, on the malleability of identity, on the value of memory—is all designed to inform and even guide the nature of that play.

If the eighties were a period of experimentation in varying forms of image and text display in videogames, the nineties were a time of graphical refinement. On the side of technology, floppy disks and cartridges gave way to CD-ROMS; text-based games and pixelated graphics gave way to 3D gameworlds. On a cultural level, this advancement was pushed as "a new generation" of videogame power, in order to further industry sales on the newly developed PCs and home consoles. As a direct consequence, an industry-wide narrative of graphical realism promoted these 3D worlds as being more immersive than what had come before. At the crest of this wave, the simple accessibility of *Myst* and *DOOM* popularized the first person perspective---and the emphasis on graphical realism—to mass audiences.

But graphical realism alone could not account for *Myst*'s rich backstory, or *DOOM*'s style and interface, let alone lesser known but still valuable videogames such as *Planescape:Torment*, which offered a text-heavy interrogation of identity, memory, and belief. To that end, Kendall Walton's theory of mimesis of make-believe offers an alternative perspective that fills in graphical realism's blanks. Rather than consider text in a visual-based medium as surplus, the make-believe theory casts it as part of a multitude of elements that contribute to a gameworld in which the player—and indeed, entire play communities—can establish their own worlds of play. In the next chapter, we will investigate how one commonly-used videogame prop—the book—is utilized to illustrate paradigms of knowledge and

information in videogames.

5. The Book in the Game: Variations on a Theme

Introduction

In terms of mimesis and text, how text-focused media such as books are treated within videogames can reflect and influence not just the playworld the player creates, but larger cultural trends regarding media use. Videogames are consumed primarily as sources of entertainment, and the quality of graphics can act as a gauge for the quality of entertainment. Text in a videogame, by contrast, is rarely held up to similar standards and presented instead as a means of support; to gauge text's entertainment value in the current media field, a better measure is the book, and in the twenty-first century, its fate seems to be hanging in the balance. The United States' National Endowment for the Arts, long serving as public barometer for the book's fortunes, chronicles its rises and falls from the 2004 report Reading At Risk: A Survey of Literacy Reading in America, to 2009's Reading on the Rise: A New Chapter in American Literacy, to the most recent 2015-published report on the 2012 survey, How A Nation Engages with Art, in which the pendulum swings back, the number of adults reporting having read at least one work of literature in the previous year dropping below 50% (24). Articles in Business Week run with headlines such as "The Print Media Are Doomed" and literary scholars Umberto Eco and Jean-Claude Carrière argue for a new future in *This is not the end of the book*. What all these discussions represent is not so much an interest in reading, but a fascination in the book as an artifact, as a technology. The issue up for debate in all of these works is the nature of the book, that the book represents a continuity of human knowledge stretching back centuries, and now stands fissured thanks to its replacement, the new technology of the Internet, e-books, and digital media, which purport to handle not merely knowledge, but information. Nor is it just a

replacement; in comparison to the book, digital media can present anything the book can, and, in fact, present itself *as* the book, incorporate the book into its structure. To use Bolter and Grusin's terminology, new media hypermediates the book, and the book becomes a subject of remediation.

The technological Darwinian narrative, in this case, reveals the limitation of remediation, which tends to cast technology and media in terms of old and new—and the very term "new media" plays into this casting. In terms of variantology, remediation and this overarching narrative of the book's assumed obsolescence frame it as a dead medium, when it could instead be one variant among many. Or, as communications and culture studies scholar Ted Striphas argues, rather than remedial, a better term for the book's function today is "intermedial," or intermediation, a concept grounded in three propositions: "first, media should not be isolated analytically from one another; second, the relationships among media are socially produced and historically contingent rather than given and necessary; and third, media rarely if ever share one-dimensional, causal relationships" (15). Recognizing intermediation requires recognizing how the three circuit method applies to the book in relation to other media forms, that they do not exist either independently or prior to other media in terms of the three circuits of cultural production, technological production, or economic production. In fact, Striphas points out, far from being the bastion of auteurship and guardian of knowledge that romantic notions of the book would hold, the printed book has long been on the forefront of industrialization and modern capitalism through the transition to new technology, labour practices, and patterns of consumption (8). And now, the printed book exists in tandem with digital media, joining it in a complex web of global production and distribution.

It should be no surprise that the videogame plays a part in this circulation. For a good portion of the videogame's existence, after all, the book served as a quintessential videogame peritext (a paratext that exists outside the "perimeter" of the main text), as the instructional manual accompanying the game cartridge or disc. Nor should it be a surprise that a parallel exists between the videogame's narrative of graphic-based technological superiority over outdated text approaches and the view that new media will as a matter of course replace and retire the printed word. And it is more than a parallel; cultural assumptions about the book as an artifact of history and a material record affect what text can and is used for within videogames. Representations of books within videogames act essentially as hypericons, conveying arguments concerning how the printed word—and, by extension, text—is to be interpreted. Frequently, on a surface level, these portrayals tend to reinforce existing stereotypes regarding books and knowledge, marginalizing books as outdated technology that the videogame can draw on and manipulate as needed. But with an appreciation of the variety of how books can be utilized within games—as external paratext, as framing device, as menu system, as base for diegetic history, and as allusive network—comes an appreciation of how books operate as mimetic props for far more nuanced media relationships and games of make-believe.

The representation of books in videogames is not entirely an unexamined subject; just last year, the journal *Mémoires du livre / Studies in Book Culture* released a special issue, *Livre et jeu vidèo / Book and Videogame* which features essays that investigate the potential connections between books and videogames in a number of different ways, including reading practices, gamification of e-books, and other related topics. As editors Barnabé and Dozo state, the issue explores intersection from two primary orientations: "d'une part, le jeu est considéré

un moyen de renouvellement ou de modernisation du livre et, d'autre part, le livre est envisagé comme moyen de légitimation de jeu. [On the one hand, the game is considered a medium of renewal or modernization of the book, and on the other, the book is envisioned as the medium legitimizing the game.] "On first glance, such a claim may seem to be primarily relying on the concept of remediation, in that the book borrows the newness of the videogame, and the videogame leans on the prestige of the book's longer history. The transition from remediation to intermediation comes from the authors' individual efforts and the combined juxtaposition of their research.

In that respect, three articles in particular are worth detailing for their approach specifically to the way books and actions associated with books are represented in videogames. Cédric Chauvin and Emmanuelle Jacques investigate three videogames where books play a primary role in narrative, and question how that role is reflected in the associated gameplay. *Myst*—always a popular choice on the subject of videogames and books—is 'la lecture comme exploration immersive": reading as immersive exploration, a reading more or less in line with Bolter and Grusin's argument on *Myst* and its presentation of immediacy. L'Album *secret de l'oncle Ernest*, in contrast, never permits the player entry into the book, as each double page constitutes the ground on which the game is played, turning the game into an "espacemémoire," a memory space chronicling a life that the player explores through the medium of a book. Finally, *Book of Spells* uses the PlayStation Move to allow the player to replicate spells found in an augmented book, but fails to do anything notable with the combination, becoming a rather inferior showcase for the Move technology. Through their detailed study, Chauvin and Jacques illustrate the potential variety that exists for allowing play with books in the context of

a videogame; the relations available are more than just old media and new media.

In their separate articles, Thomas Morisset and Vincent Mauger take a more general approach to book representations in videogames, outlining categories suited to their respective theses. Morisset's interest is in the way the act of virtual reading unfolds within videogames, as a phenomenological experience. As such, his categories are focused on winnowing representations to those on which he wishes to focus: books that appear but cannot actually be read, books that are consumable as an item to raise statistics or merely there for aesthetic reinforcement; and books that are read, which can further be divided into those diegetically depicted as being read by the player-character and those that appear to be extra-diegetically present for the player alone. Mauger, on the other hand, is less interested in books being portrayed as actual books and rather wants to consider the in-videogame book in terms of its metaphoric function. To that end, he identifies five types of metaphor: the portal book, or book as transport, as in *Myst*; the book as battery, wherein it is used as a form of power to draw upon; the book as tonic, a one-time consumption allowing total knowledge assimilation; the book as weapon, which can range from a source of spells to a blunt object for bludgeoning; and finally, book as hypomnematon, a framework of exercises for routine performance and selfalteration.

For my part, I will be borrowing from each essay what it best lends to an investigation of videogame books in relation to the presentation of videogame text: from Chauvin and Jacques, the close study of individual works that illustrates the variety of approaches to book representation, and from Morisset and Mauger, terminologies and categorization systems that allow more general discussions of videogame book types. But before delving into that

examination, one more work is worth regarding. Despite the ubiquity of books within videogames, their presence has received little direct scholarly attention in English. The exception is Alice Henton's study of how Bioware's Dragon Age: Origins incorporates the archive into its plot, and how it challenges common conceptions of the archive's authority. On a broader level, Henton argues that the presence of the archive in videogames can patch the divide between narrative and game, that "most narrative-based digital games rely upon some form of in-game archive to engross players in the gameworld. 'Journals,' 'codices,' and 'logs' are searchable databases that allow background information and mission data to be always accessible to the player, who must create, maintain, and manage these resources in order to successfully navigate and complete the game" (70). Further, the videogame archive acts as part of the glue binding player with character, as both are called on to perform in response to archives: as the character interacts with the story, the player's experience of the game is about "assimilating, organizing, and deploying knowledge" (72). In Henton's estimation, many, if not all, narrative games take advantage of our real-life experience in utilizing archives to more closely connect to the game's character and world.

More specific to the game at hand, Henton examines five instances of archives at work in *Dragon Age: Origins (DA:O)*; I will limit myself to describing two of them, the Warden treaties and the story of Flemeth. A starting plot point of *DA:O* is that the order of Grey Wardens have been massacred, and as one of the few survivors, the novice PC must amass old allies to take the fight back their attackers. The means to this rallying are the Warden treaties, "Promises of support made to the Grey Wardens long ago" (75). Henton notes that these treaties become emblematic of the old power of the Wardens, and arise again and again as a

narrative point in the game: "Each time, the treaty receives careful, even obsessive emphasis. ... Without the archive, the young Wardens have no authority" (75). The very presence of the archived treaties is enough to establish the authority of the past. In contrast, the Flemeth situation challenges archival authority. In her codex entry, ⁶⁹ Flemeth's tumultuous relationship to her husband Bann Conobar and lover Osen paint a tragic love story; her own adopted daughter Morrigan, on the other hand, claims that Conobar never met Flemeth, and that she was attached to his legend of civil strife much later. This difference is relevant to the player's playworld and the choices offered within the game, because the PC at one point has the option to attack Flemeth, a decision which may be influenced by sympathy for her past (77). In short, *Dragon Age: Origins* presents, with the Warden treaties, an instance of authority offered to the written word; and, with Flemeth's story, an instance of the potential fallacies of the historical record.

While my concern is less with theoretical underpinnings of the archive and more with the way books and the written or printed word are offered as representations in videogames, the two examples are worth remembering for how they represent two very different approaches to books in videogames. Even though the actual text in the Wardens' treaties is never represented, and rarely even cited, the presence of the treaties is enough to imbue authority and authenticity on its possessors. Likewise, it is relatively rare for a videogame to represent the text of a book in full, but it is much more frequent for a representation of that book to be used as a symbol of authority. In contrast, the Flemeth example is more the exception that proves the rule, as it is relatively rare—following tropes in fantasy at large—for a historical text within a videogame to

The codex is the compilation of story-relevant information in *Dragon Age: Origins*; it does this compilation automatically, expanding as the PC encounters new information. The codex's function as a totalizer of knowledge will be discussed soon in regards to *Dragon Age: Inquisition*.

be contradicted. Together, they represent two poles in approaches to written textual authority in videogames.

As will soon be evident, textual authority is not the only purpose for books within videogames. Contrary to the progressive technology narrative, videogames still rely on books, using them for more than preserving their own sense of newness. A game may present its narrative, and by implication, the entirety of the game, as a story contained within a book, as in *Shining Force* or *Final Fantasy Tactics*. It may go a step further towards diegetic inclusion and style menu system in the form of a book, as in *Nier*—the system of knowledge management to which Henton refers. A book may reinforce the gameworld by acting as imaginary prop, the way it does in *Wild Arms 2* and *Dragon Age: Inquisition*. It may become an increasingly complex, even physical, paratext, as with *Ni no Kuni*. And finally, it can form a part of a much larger web of transmedia allusion, as in *Alan Wake*. Like the multifaceted purposes of the videogame manual outside the game, the books inside the game and the text they represent have become increasingly complicated, supporting more functions than a graphic-based realism might suggest.

Book as External Paratext: Ni no Kuni and the localization of play

The connection between printed material and a videogame can take many different forms; Level-5's 2013 Ni no Kuni: Wrath of the White Witch illustrates one such example, where modifying the nature of the paratext significantly modifies the way the game is played, and the paratext in turn becomes a commodity as much as a fantasy prop. Many of the typical videogame-related book's functions as external paratext, or epitext, have already been discussed at least generally in the first chapter: an instruction manual can contain background information on the gameworld and story, or even present itself as being from the gameworld, such as the manual for the PS2 game *Mercenaries*, where the text on the page is presented as a mission dossier lying open on a desk. Under this latter method of representation, the manual becomes a found text (usually, a book, or some other sort of written word medium). As such it plays a more direct role as a tangible fantasy prop, enabling the player's fantastic mimesis, in Walton's sense, with the gameworld. At an extreme, books included with the game can become collectibles in their own right, the ownership of which may constitute an increase in gaming capital, Mia Consalvo's game-oriented term based on the concept of cultural capital; owning a guide or artbook designed in such a manner conveys the player's consumerised and selfidentified place in gaming culture. Such is the case with, for example, the 2009 Batman: Arkham Asylum Collector's Edition, which included a behind-the-scenes DVD, a code to download a special challenge map, a 14-inch replica of Batman's batarang, and a 48-page book about Arkham's inmates, written from the perspective of a physician working at Arkham Asylum. While that final item does contain relevant information about the game's characters and does, through its content and physicality, constitute a fantasy prop, its purpose is less to

instruct or entertain and more to play its part in the set of media objects that enable the purchaser of the Collector's Edition to demonstrate her gaming capital through possession of these items.

Another subset of manual types relevant to book epitexts are manuals that are not just aides to help the player with the game, but are essential in order to reach the game's completion, although the connection is not immediate. This category could include videogames that are so complex that the manual is a necessary addition as a reference guide, or a videogame where some piece of crucial information was left out of the game itself either deliberately or through neglect on the designers' part. Of these possibilities, the deliberate omission is perhaps the most interesting, for what it reflects about a certain period of gaming technology and player-developer relations. In the mid-80s and 90s, there was a period before scanning technology and the Internet were widely available and DRM (digital rights management) software limiting how a program could be distributed was not yet widely used. As a result, PC games of the period were much more vulnerable to being copied than cartridgebased games Developers responded by placing codes and questions in the game's instruction manuals that the game would require the player to provide, under the logic that, while photocopying was perhaps not that much more difficult than copying program disks, the extra work would deter would-be thieves, or perhaps even convince them to buy the game outright to get past a particular block. For example, Sierra Entertainment's 1994 PC game The Incredible Toon Machine required players to input a series of icons from the game in order to move

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An infamous example of this omission is Meryl's radio frequency in *Metal Gear Solid*, where the number (140.85) is found nowhere in the game and the player is referred not to the manual, but to the back of the CD case for the game. Speculation still exists as to whether this dependency was part of the series' meta-gaming tactics, a protection from CD copying, or simply correcting an oversight.

beyond the start menu, requesting codes from different pages of the manual; if the game requested the password from page 15, the player would duly have to look up that she must respond with a bomb, pencil, and bomb.

While *The Incredible Toon Machine* had at best a superficial connection between game and password, other videogames created more direct ties. Another Sierra game, the 1991 remake of the original Leisure Suit Larry came with epitexts more explicitly framed as such, with physical brochures for in-game locations. The questions the game required before play are derived from the brochures, and are typical of the game's more than slightly misogynist humour: "What do the cowgirls have at the Palomino Ranch?" was one such question, and the correct answer, located in the brochure, was "c: Jugs o' moonshine." There were also several computer RPGs that placed large sections of its narrative—the in-game story, rather than just a prologue—into the manual and booklets that came into the game, numbered so that the player knew when to refer to each. This step was, in part, for copy protection, but also to avoid lengthy in-game text displays. As an example, the 1988 game *Wasteland* not only had a booklet of paragraphs, it included fake entries to dissuade players who would "cheat" by reading ahead. The very first entry, in fact, is one of these, and plays out in a manner that *Leisure Suit Larry* players would find familiar:

You creep up to the window, and in the soft muted tights [sic], you see a tall woman with long, blond hair. She sits before a mirror and brushes her hair, then stands and walks over to the sunken tub to her left. She kneels and her blue, silken robe drops to the floor. She turns the water and steam slowly fills the air. You watch in fascination as she reaches down into the tub, whirls, and points an Uzi in your direction. 'Stop reading

paragraphs you're not supposed to read, creeps.' She sighs deeply. 'Next time I'm going to demand they put me in a Bard's Tale game, this Wasteland duty is dangerous.'

("Wasteland"1)

The quotation is worth citing in full because it illustrates how these paragraph texts operated to bring paratext, the three circuit model, and fantasy props into circulation with each other. Its function as a fantasy prop is fairly evident, for while it does not directly speak to any event that occurs in *Wasteland*, the sexualized gaze and violence in the passage is clearly meant to appeal to a heterosexual, adolescent male fanbase. Further, it functions as an epitext for the videogame, not only by imbuing it with that sense of sex and violence, but also by framing a previous game by the developer, *Bard's Tale*, as a game inferior to the more "dangerous" *Wasteland*. And this appeal to gaming capital—that the players, by proxy, are better than *Bard's Tale* players, even if they are also cheating "creeps"—illustrates how the *cultural* circuit plays out for the game, to the point where it overshadows the fact that the paragraphs are also there to compensate for the *technological* difficulty in displaying large amounts of text on screen and the *economic* need to push players into purchasing the full game. In short, *Wasteland's* booklet of passages is a perfect example of how print text presented a solution to cultural, economic, and technological videogame issues.

Admittedly however, with rare exceptions, these paragraphs were generally not portrayed as found objects within the gameworld, let alone as books, and they were generally phased out entirely as improved technology was deemed to render them moot. Still their history is a useful context for a more recent game, Level-5's *Ni no Kuni: Wrath of the White Witch*, 71 in

The Nintendo DS version's title is *Ni no Kuni: The Jet-Black Mage*, a title which reflects its slightly different antagonist and plot.

which the two types of paratext above, those serving as narrative reference and those serving as commodity object, come together to change the way the game is played. In *Ni no Kuni*, the player character Oliver is brought into the world called Ni no Kuni and quickly given a magic wand (a mere stick, at the start of the game), and The Wizard's Companion, a bound tome that contains a list of spells, items, lore, and other information pertaining to the game. In the DS version of the game—which was released only in Japan—The Wizard's Companion (or, to use the Japanese term, The Magic Master⁷²) is an actual, physical object that comes with the game cartridge. In the PS3 version, the version that was adapted for international release, the book is instead digital, and can be perused by an in-game menu. Reportedly, it was the necessity of the book that made the DS localization unfeasible due to the difficulty of commissioning a print translation and distributing the book with the game (Gantayat). Nevertheless, a rare special edition of the game, called The Wizard's Edition, did ship with a physical, English version of The Wizard's Companion, and demand was so great that a shortage ensued (Moriarty).

Namco's (the game's publisher) localization and porting choices create a situation in which The Wizard Companion operates simultaneously as a fetishized consumer object and fantasy prop and discretely as an epitext and peritext (in the DS and PS3 versions, respectively). The effect is to make multiple perceptions of the book available, rather than just the progressive technology view that sees the paper form as digital's lesser fore-bearer. Like the case study book for *Batman: Arkham Asylum*'s special edition, The Wizard's Companion's

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With the various localizations and versions of The Wizard's Companion/The Magic Master, which term is designating what version can become confusing; The Wizard's Companion could refer to the digital version that within digital PS3 versions of the game to English-speaking countries, or it can refer to the limited edition print version, and The Magic Master could refer to either the digital version associated with the Japanese PS3 Ni no Kuni or the paper-based version designed for use with the Japanese Nintendo DS version. For simplicity's sake, all versions will be referred to as The Wizard's Companion, and whether it is meant to refer to the digital or print version or the PS3 or DS version will be made clear in context.

inclusion in the Wizard's Edition places it on a similar level to the package's other elite collectibles: a plush doll of Drippy, the PC's sidekick; a soundtrack CD; *Ni no Kuni* artwork cards. While the latter two items are reasonably common for videogame special editions, they take on special meaning for *Ni no Kuni*, as much fanfare was made out of Level-5 successfully getting the renowned animation studio Studio Ghibli to animate their cutscenes and provide some of the game's music; thus, the objects are not merely collectibles from Level-5, but from the studio itself. In a public talk, president and CEO of Level-5 Akihiro Hino framed *Ni no Kuni* in terms of Studio Ghibli's involvement, saying (likely with some false modesty) that any success the game achieves will be "because of Studio Ghibli, and that's fine," and positioned himself as a fan, claiming that he felt "like a child going to an amusement park" (Nutt). The emphasis on Studio Ghibli's involvement means that possession of the Wizard's Edition confers not just gaming capital, but larger cultural capital. And both of these translate to actual capital as well, as the Wizard's Edition currently sells for just under \$500 (Canadian), with the book alone selling for \$250.

Speaking more generally, The Wizard's Companion's status as a commodity is not incompatible with its supposed status as a "dead" medium; music records share a similar sort of status, where their cultural cache derives in part from their rarity, due to being supplanted by other technologies, and their esteem among a particular subculture. For that matter, the commodity status of rare books has a history that long predates the advent of digital culture. Where the utility of the Wizard's Companion becomes more medium-specific—or rather, media-specific, given that the point of interest is the difference between the DS and PS3 versions—is in its function in-game, both in combat and as a reference tool. Out of Mauger's

five metaphors—weapon, transport, tonic, battery, and hypomnematon—the one that comes closest for combat is, unsurprisingly, book as weapon, given that the spells available for casting are contained and described within the Wizard's Companion. The actual situation is, technically, a little more complicated; the power to cast spells in general comes from Oliver's wand, but the rune that must be performed for a particular spell to work is inscribed in the book. In the DS version, this process is imbedded into fantasy props; the physical book is on hand to look up the runes, and in order to make the spell work, the player must use the DS stylus to draw the appropriate rune on the bottom touchscreen. Further, while both versions of the Wizard's Companion contain information on enemy monsters that would be useful during a battle, the digital version is only accessible when the larger menu screen is available, which means it cannot be consulted during battle. The respective games' battle systems are designed differently, at least in part, as a result: the DS version's demand for stylus input and the opportunity to look up enemy statistics fits its turn-based combat system; the PS3's simpler command input—spells are simply chosen from a list of options—and the inaccessibility of the Wizard's Companion during battle works well for its more active battle system that does not provide time for tracing out symbols or looking up information. The design choice to specialize the combat for each system reflects and reinforces the economic and technological differences between the PS3 and DS versions.

The differences surrounding the printed and digital versions of the Wizard's Companion extends beyond combat as well, and affect how they are perceived in relation to their respective versions. The printed Wizard's Companion is an epitext, and as something outside of the game, it is immediately available to the player in its entirety. If the *Wasteland*'s paragraphs book is

correct in accusing a player who reads entries without being directed to them as a "cheater," then the paper-based Wizard's Companion is one big cheat sheet, with sections on all the monsters, items, places, spells and more that the player will discover throughout the course of the game. In contrast, the digital Wizard's Companion that the PS3 player receives is a relative *tabula rasa*, most of its pages kept blank until the player encounters the necessary item, monster, region, or so forth in the game first. Further, while the printed Wizard's Companion is more or less as easy to flip through as any physical book, the digital version's pages are loaded separately and are somewhat tedious to turn through; instead, the PS3 version provides a series of sectional shortcuts to skip straight to a desired section, whether it is the section on monsters, or the description of spells.

Several consequences stem out of these design choices, consequences that determine how players relate to *Ni no Kuni* as a whole. The printed Wizard's Companion is a holistic source of knowledge, a complete compendium of knowledge relevant to *Ni no Kuni*. That it can be read independently of the game means it has a potential to function as gateway or entryway text (Gray), or at least do so in a greater degree than its digital equivalent. As a book, it functions as a guide or source of knowledge, for the player to dip into and learn from. In contrast, the digital Wizard's Companion is an in medias res peritext, a paratext from within the game that is always meant for players already familiar, and to some degree, already knowledgeable, about the game. In a sense, it is not only an in medias res paratext, but in medias res period, as it is never complete until the game's end—and, depending on the player's actions, often not even then. Instead of a source of knowledge that exists independently of the

Mia Consalvo explores the connection between cheating and books designed to confer knowledge about videogames—specifically, strategy guides—in much greater detail in the second chapter of her book, *Cheating* (41-64).

game and player, the digital Wizard's Companion (while still functioning as a reference text, just as the printed version does) is more a scrapbook and trophy collection. The book grows and expands as the player explores the Ni no Kuni world; in this process, it is similar to the journal logging of *Planescape: Torment*, but where *P:T*'s journal proceeded in a single linear progression, the pages of digital Wizard's Companion are decontextualized from their original uncovering and placed according to the pre-established system built into the book's menus and subsections. The paper-based Wizard's Companion is of the future and present, representing the set of knowledge the player must master to finish the game, and the information required in the present moment of combat. The digital Wizard's Companion is of the past, with a sliver of the future, a compilation of the things the player and has seen and the places she has been, with blank pages hinting at what is to come.

The many versions of the Wizard's Companion for *Ni no Kuni* come out of, or at least, correspond, to economic and technological decisions and in turn influence what the book means in terms of the game at hand, and videogames in general. In a way, they are the inverse case of the earlier *Wasteland* paragraphs booklet and the other copyright protection measures; while the latter were put into print material to compensate for the costs of pirated games and technological limitations, the digital Wizard's Companion and its North American limited print edition exist because of the higher costs of printed material and technology that allows the entirety of a book to fit within the confines of a videogame. The rarity of the English print Wizard's Companion leads to it being treated less as a medium of communication and more as a collectible in line with Studio Ghibli prints; the Japanese print version serves as a totality of knowledge, whereas the digital versions paired with the PS3 game are an expanding measure of

accomplishment. While all versions contain approximately the same information, the circumstances surrounding each illustrate how the meaning and utility of a videogame book is subject to change.

Book as Frame: Final Fantasy Tactics and the Story of History

One feature of instruction manuals discussed previously is their potential to cast videogames as other types of fictional narratives, such as the *Metal Gear Solid* manual that framed Snake's adventures as a comic, or the *We Love Katamari* manual that took on the aesthetics of a children's book. This type of framing can also be accomplished on a peritext level, within the videogame itself. The entire game then becomes a quasi-performance of an imagined existing text. The book frame stands in contrast to other possible videogame frames as something unchangeable and already-happened, but even this permanence is open to nuance, as the historical archives of *Final Fantasy Tactics* demonstrate the potential complexity of presenting a game narrative as written and recorded history.

When a player starts a new playthrough of the 1993 Sega Genesis game *Shining Force:*The Legacy of Great Intention, a prelude presents a brief yet familiar fantasy story of an ancient evil who swore to return a thousand years after its defeat. After the title screen, the game turns to a small elfin girl reading the myth from a large book before her. She concludes that the evil has indeed returned, and beseeches the player to combat it, introducing herself as Simone. After responding with her own name, the player enters the game proper, in which Simone is never seen; she is present only when loading a game from the start menu (and the start menu itself is framed visually as choosing among Simone's speech bubbles) or at the game's end. At the same time, however, the game never quite loses sight of this book framing, dividing its areas up into "chapters" and occasionally employing an omniscient narrator (who may be Simone, or the book she reads from) to transition between scenes. The game is somewhat ambiguous on exactly the relationship between the main action and Simone's book; Simone's dialogue

implies that the player is relating the game's events to her and she is then recording them, but the chapter headings and narrator imply Simone is reading of the events from a record.

Simone's closing narration at the end of the game only further complicates matters:

Swallowed by the murky brine, the Castle of the Ancients was lost forevermore. The battle over and Rune saved, the warriors of the Shining Force returned home. Led by Mae, Guardania was rebuilt and Anri inherited the throne. As for [Player Character], he is believed to have perished at sea along with Dark Dragon. [Simone faces the screen.] And that is the official ending. But you and I know differently, don't we? Somewhere, evil stirs in a land that has need of a hero. And I know you'll be up to the challenge, [Player Character]!

In a blending of player and character reminiscent of the *Super Mario Bros. 3* instruction manual, the player is simultaneously the figure being told a history written long ago, and the one acting out that history—and, in this final scene, the one transcending that history, as Simone announces that despite appearances, the player has lived to fight again, albeit in some other game or story.

A videogame that uses the book as a frame almost inevitably involves this ambiguity that mixes player and reader, but rather than the confusion being a source of dissonance, it is a position of strength, allowing the player to rely on it as much or as little as she sees fit—and, like the book as external paratext, many variants are possible. Sometimes, the frame is exceptionally light—for example, the 2000 PlayStation game *Wild Arms 2* makes no explicit mention that the player is working through a book except for the loading and saving menu screen, in which the available blocks of memory appear as books—opened books for save files,

and closed books for empty blocks where save files could be created. The books—and for that matter, the term "save file," borrowed from more general computer operation—constitute a skeuomorph, "a design feature that is no longer functional in itself but refers back to a feature that was functional at an earlier time" (Hayles 176). Where once a travel diary would transcribe a real-world expedition, here, the graphic of a travel diary acts as skeuomorph, standing in for the process of saving player data, all without any actual text being employed.

Moving away from extradiegetic abstraction, the book as frame can be employed less as a metaphor and instead serve as a literal (albeit still fictional) device, a magical book that transports the player-character to another world. This movement fits within one of the metaphors Mauger identifies for the videogame book, the portal-book, though he also extends the definition to include maps that enable auto-travel (such as in *Elder Scrolls V: Skyrim*) or teleportation scrolls (the *Diablo* series). Nor are videogames the only medium to employ this device; Michael Ende's *The Neverending Story* and Jasper Fforde's *Thursday Next* series both employ it on a meta-level as an ability of their protagonists. In terms of videogames, examples of games that use portal-books as frames include ComiXone and the Final Fantasy Tactics Advance series (although not Final Fantasy Tactics, which will be discussed in a moment), but the obvious example is clearly *Myst*, which begins with a book containing the titular island. Myst has already been discussed at some length, so I will limit myself to a reminder of Bolter and Grusin's conclusion regarding the game's use of books: "The allegory is obvious: the book as a text should be replaced by the book as a window onto a visually realized world. Books operate best (or as best they can) under the logic of immediacy, but the computer graphics are more immediate and therefore better" (95).

As previously argued, this argument does not tell the whole story for *Myst* in particular because of its heavy reliance on text to fill in the details of its plot. It also does not apply to videogames' use of the book in general. To start with, the book as text and the book as window are not discrete concepts. Here, N. Katherine Hayles' explanation of the skeuomorph's purpose proves useful: "Like a Janus figure, the skeuomorph looks to past and future, simultaneously reinforcing and undermining both. It calls into play a psychodynamic that finds the new more acceptable when it recalls the old that it is in the process of displacing and finds the traditional more comfortable when it is presented in a context that reminds us we can escape from it into the new" (17). Hayles' skeuomorph is somewhat a more nuanced version of remediation, recognizing that media objects can act as "threshold devices" between concepts (ibid), rather than belonging firmly on one side or the other.

Some games even go so far as to then use this book-frame to subvert our expectations of a recorded historical narrative. The paragon here is the 1998 strategy RPG for the PlayStation, Final Fantasy Tactics (FFT). As mentioned, Alice Henton investigates the role of the archive in Dragon Age: Origins, how Flemeth's story undermines the notion that the officially recorded version is the true history (77). FFT takes a similar approach but applies it to the game's narrative frame as a whole; it takes Shining Force's fourth-wall breaking rhetorical question at the end of the game—when the narrator Simone looks up to the player and asks "But you and I know differently, don't we?"--and turns it into the crucible of the game's narrative. In brief, FFT has the player-character cast into the role of Ramza, a highborn noble who finds himself in a position to play a key role in the Lion War, a civil war in the pseudo-medieval kingdom of Ivalice. However, the starting frame of FFT begins not with Ramza but with Alazlam, a

historian who, many years later, is challenging the traditional, Church-endorsed account of the Lion War with one that is presented in the newly released "Duray Report" that emphasizes Ramza's role. Repeatedly in the short account, Alazlam questions the notion of "truth," and invites the player to investigate the truth with him.

From that point on, Alazam's presence, like Simone's, is minimized; more text from him appears between chapters (and again, *FFT* is another game divided up into chapters) and he appears to be the author of the chronicle, *FFT*'s equivalence of a codex that collects the major events and characters that the player has encountered. And also like Simone in *Shining Force*, Alazlam doubles as both oral and written narrator, and the player's exact relation to him is ambiguous; he is working with two different written accounts of the story's events, but he is also verbally addressing the player with his own interpretation; the player is both the player-character Ramza experiencing these events and some other sort of character Alazlam is supposedly addressing. The ambiguity allows for the rigidity of a written narrative—these are events that already happened, and so the player is destined to succeed—while still allowing a degree of agency that is often presented as a positive, necessary part of a successful videogame experience. Further, the discrepancy between the "official" events and the "Duray Report" adds to the degree of player agency, that she is charged with finding the "truth" behind the clerical cover-up.

FFT's set-up, however, allows for even more complexity on the subject of historical record. Joffe analyzes the situation at great length, framing it in terms of Italo Calvino's Invisible Cities and the way the novel is deliberately vague on whether the cities it poses are Kublai Khan's construction of Marco Polo's stories, or Polo's stories themselves. Partway

through *FFT*, the player is introduced to Durai Olan, the supposed author of the Duray Report. In the game, he is one of the more noble characters, but Joffe points out that we cannot trust what the game shows us in this regard, because if we are playing through an account of the Duray Report, Durai likely altered it to appear more beneficial to him, as a sort of "aristocrat apologia." Further, Alazlam is hardly a disinterested party; while written word is sometimes presented as "discourse that cannot be questioned or contested as oral speech can be because written discourse has been detached from its author" (Ong *Orality and Literacy* 77), by turning Alazlam into a character rather than just a disembodied narrator of a written text, *FFT* opens the door to considering his motivations as well. Near the end of the game, it is revealed that Alazlam is a descendent of Durai, and thus has his own motivation for seeing the Duray Report reach a wider audience. Despite his claims to be searching for the ultimate truth behind the past, Alazlam has reason to be invested in a particular version of the "truth" above others.

All of these potentially conflicting motivations can lead to a player-character identity crisis, as Joffe summarizes through a series of questions:

So then: Whose Ramza am I playing as? Am I playing the objective Ramza going through the actual events? Am I playing the Ramza he would present himself to Durai as? Am I playing as Durai's Ramza, created for his text and designed either to redeem Ramza's legacy or to further a political agenda? Am I playing as Alazlam's Ramza, created from the historian's perception of the texts he is translating and shaped by his modern biases, family history, and agenda? Or am I playing as myself, and the Ramza created is from my own perceptions of the story Alazlam is telling me?

But rather than the player being paralysed by these contradicting viewpoints, Joffe interprets

the choice as empowering. He argues that a narrative framework like *Invisible Cities* or *Final Fantasy Tactics* attempts to create a situation where the player is confronted with "the power we have as an audience of potential actors and creators," that ultimately it is the player is called on to play not just in a digital, mechanical space but in a narrative space as well. This play corresponds to the sort of play Kendall Walton identifies in fiction, where the gameworld overlaps with a narrative world of the player's construction. Henton presents the archives of *Dragon Age: Origins* as organizing the player's acts of "assimilating, organizing, and deploying knowledge" (72). Joffe presents an alternative model, where the book as frame and its resulting ambiguities create a space where the player is encouraged to play with the game on an interpretative level.

The book as frame is a type of media framing with a history that extends long before the videogame. It can be interpreted, as Bolter and Grusin do, or perhaps even as the skeuomorph implies, as a way for new media to adopt the prestige of an older form, or as a transition from one form of media to another. But it can also stand more generally as a way of imbuing the traits of one media onto another, as in *Shining Force*, where chapter divisions and written legend make the videogame seem more ordered and destined to end in victory. It can even operate as in *Final Fantasy Tactics*, as an entry point for questioning how videogame identification occurs and what it means to represent the past. The book as frame metaphorically turns a videogame's narrative into a written text—in terms of the assumptions inherent in the dominant videogame narrative of graphic-based technological superiority, this act can have the inadvertent effect of downplaying the plot in favour of the more "dynamic" aspects of the game. The next section offers a contrasting view, as its category involves the case where the

book serves as menu system, a representation of the game interface, rather than a model for the game as a whole.

Book as Menu System: Variants and Strains

As mentioned, Chauvin and Jacques' contribution to the special issue of *Mémories du* livre is a close study of three videogames that feature books prominently: Myst, Secret de l' oncle Ernest, and Wonderbook: Book of Spells. The latter two in particular are games where the book is not just featured, but forms the primary interface through which the game unfolds. In L'Album, the player manipulates objects that appear within the pages of the album, advancing further into it as the game progresses. Book of Spells is similarly paced; the player learns spells, performs them (in a manner similar to the Ni no Kuni DS version's rune system), and progresses through the book as a whole. While few games base their main modes of play so centrally on engagements with books, it is not uncommon for videogames—especially videogames with a quasi-medieval setting—to present some portion of their menu systems as books; that is, it is not unusual for a videogame to employ a partially book-based menu system. The significance of menu systems in videogames is often overlooked; they are generally there to support the main action rather than take part of it, and are frequently an extradiegetic imposition on the gameworld. But at the same time, the frequency with which the player has to use the menus means that they constitute a significant procedural rhetoric—persuasion through "rule-based representations and interactions rather than the spoken word, writing, images, or moving pictures" (Bogost viii). Book-based menu systems are simultaneously rule-based representations and image- and text-based representations, and as such, the commands and options that are relegated to such a system have ramifications in terms of how books and their utility can be conceived. A series of examples will set up the common case, minor variations, and the extreme end, where this presentation is incorporated into the plot of the game, as in

Cavia's *Nier*. Each variant presents its own interpretation of the book based on the procedures involved in accessing it.

The first and foremost consequence of relegating the book-related aesthetic (whether it is presenting menu options as being printed or hand-written, or appearing on a surface meant to resemble aged paper) to interfaces and menu systems is that the book is relegated to the background, away from the main action of the game. Unlike in *Book of Spells* or *L'Album*, this book does not constitute the part of the game the player is meant to view as interesting or dynamic, but the support system behind it. This suppression fits in with the larger narrative of graphic-based technological superiority; text and book both are obscured in favour of game elements that place greater emphasis on image-based play.

But the situation is more nuanced than it first appears at first glance. When looking over games that employ some sort of book-related aesthetic in their menu systems, what is particularly striking is that the employment is rarely all or nothing. Most games settle on a mixed aesthetic, presenting only part of the overall system in book form. The implication, then, is that for the designers behind such games, only part of the interface is meant to be engaged with in a manner reminiscent to reading, and which part can create very different modes of engagement. In particular, of the games discussed thus far two in particular employ a partial book-based menu system: *Ni no Kuni* and *Planescape: Torment. Ni no Kuni* has a portion of its menu systems—but only a portion—taken up by books. In the PS3 *Ni No Kuni*, the digital Wizard's Companion's role has been sufficiently described already; in short, its main function is to tally up how much of the game the player has experienced. What is more interesting is what system menu functions are placed in other diegetic items instead of the book: a bag for

items and weapons; a cauldron used to combine items; a cage for managing familiars; a journal for listing ongoing and completed quests (which means there are, unusually, two separate books featured in *Ni No* Kuni's system menu); a locket containing the emotions the player-character has discovered; and, bereft of a diegetic item to represent it, the game settings such as difficulty and sound. Finally, there is the Telling Stone, a sentient rock that manages statistics not contained in the manual, such as chests found, tutorials, and even the percentage of the Wizard's Companion itself that is left to fill in.

The result is a sense of controlled chaos, a hodge-podge of options that could, had the designers chosen, have probably been somewhat streamlined. In this case in particular, they were somewhat hampered by *Ni no Kuni*'s unique demands; being an adaptation of the printed Wizard's Companion, much of the digital version's form and content was already set. What remains is something of a compromise: the Wizard's Manual is set apart from the more extradiegetic game commands, such as saving and adjusting difficulty, but also set apart from the more active options that need to be checked frequently or have a more dynamic component to them, such as the Cauldron or the equipment screen. As corresponds with the findings previously, the menu system reinforces the idea that the Wizard's Companion—and by extension, books in general—are objects to be consulted as needed, but need not be consulted as frequently as other options.

The Wizard's Companion, separate from the more dynamic and variable parts of the menu system, acts procedurally to decontextualize the knowledge that the player acquires, placing the results of her acquisitions and adventures into their preset area of the Companion. *Planescape: Torment*'s journal, by comparison, is a much more personal expression of the

player's progress. Like the Wizard's Companion, the Journal is separate from other menu options, to an even greater degree, since the journal menu is separate entirely from the other menus, rather than contained in a master menu as in the PS3 *Ni no Kuni*. The effect is, again, to separate the journal from other, more dynamic options. However, unlike the Wizard's Companion, the journal's function is not so much to decontextualize knowledge. Rather, by its role of summarizing the significant game events in terms of when and how the Nameless One responded to them, the journal is a highly (or at least comparatively) personalized record of the player's actions. While the journal may not be consulted as often as other menus, the notifications of journal updates ensure the player is constantly reminded of its presence. The foregrounding of the journal's significance and its separation from menus that monitor more transitory states reinforce the significance of personal identity and composition, one of *Planescape: Torment*'s primary themes. The design of the journal in *Planescape: Torment* presents the book as something that is created, rather than assimilated.

Another set of examples will illustrate both the variety and the limitations on the partial book-based menu systems; let us consider Atlus' 2010 *Radiant Historia* and Square Enix's 2014 *Bravely Default*. The games are broadly similar, in that they are both turn-based combat JRPGs developed for handheld systems (the Nintendo DS and 3DS, respectively), both feature plots that involve the existence of alternate timelines, and both have large subsections of their menu systems devoted to plot-significant books. But the effect to which they are deployed differs greatly; *Radiant Historia* offers a variation of the portal-book, whereas *Bravely Default* offers a more encyclopedia-oriented book-based menu system. In *Bravely Default*, the book in question is D's Journal, a journal found in the possession of one of the party characters, the

amnesiac Ringabel. In terms of the game's plot, it serves a prophetic role, as it describes events in the future that unfold slightly differently in the player-characters' experience; Ringabel consults it several times over the course of the game, as a hint as to what to do next—in a way, it is a sort of diegetically approved strategy guide, albeit one the player has no direct access to.⁷⁴ In terms of menu system function, it contains these writings, but it also contains lists of people and locations, an encyclopedia of items, a bestiary, a help menu, and an event viewer, among other options. In short, it functions much the same as the Wizard's Companion of *Ni no Kuni*, but whereas the former focuses on creating a record of the player's activity, the writings included with D's Journal, by virtue of describing a history slightly different from the player's, serve to present the rest of the Journal's contents as a possible outcome among many, rather than the frequent alternative, a passive accumulation of the player's assimilation of the game's content.

Despite having a superficially similar plot to *Bravely Default*, as both feature characters attempting to set things right through traversing multiple timelines, *Radiant Historia* takes a different approach to its book-based menu system. In the game, the player controls Stocke, a man charged with using the White Chronicle to not just move back and forward in time, but also between two timelines, one in which he remained an intelligence officer and the other where he joined his army's front line. The primacy of the White Chronicle to the game as a whole is immediately made clear, as it also functions as the game's narrative frame;⁷⁵ in the

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While not directly relevant to matters at hand, it seems worth noting that both *Planescape:Torment* and *Bravely Default* feature player-characters (The Nameless One and Ringabel, respectively) who are amnesiac and place great store in the value of journals as a form of memory preservation; another game that will be discussed the conclusion, *Lost Odyssey*, features yet another amnesiac protagonist whose memories surface in a word form. For a discussion on amnesiacs in videogame settings, see Lenny James Valentine's "Amnesiac Avatars: The Role of Memory Loss in Fantasy and Game."

⁷⁵ Though the subsections of this chapter treats the different presentation of books in videogames in a discrete

pre-title prologue sequence, the White Chronicle rotates in the bottom screen while the following text scrolls across the top: "The Chronicle tells of history engraved by man into the memory of the stars above. The Chronicle searches these engraved histories for a pen that will rewrite them. It falls to thee to become time's master and carve a path to the future..." Mixed metaphors aside, this introduction obliquely orients the player to the game's main action, using the White Chronicle to alter history(ies), and it does so by framing player agency as a form of writing. Within the game, this process amounts to traveling forward and back between the two timelines, using information gained in one to change the other, and thus "rewriting" history. The White Chronicle is accessible at save points, and selecting it brings the player to a graphic representation of the nodes on both timelines that the player can access, dual sets of crossing lines that progress to the far right, representing the latest point in time to which the player may go. The ability to access and return to the same location at different points in the plot inverts videogames' typical focus on space and encourages the player to think in terms of time and events instead. And by serving as the means for transport, The White Chronicle acts as bookframe, portal-book, and book-based menu simultaneously. Rather than being shunted off as a secondary reference, the White Chronicle is the center of the game's action, the fulcrum of its events, and as such, it is a game that posits the centrality of authorship as the expression of personal agency.

At this point, certain general principles regarding videogame books in terms of menu systems have come into focus. Placing a book design in the menu system moves it away from the more dynamic aspects of the game but could potentially also make it a ubiquitous part of the playing experience, in much the way text is pushed from the center of the gameplay

manner, as this example and earlier Ni no Kuni illustrate, a single game can support multiple types.

experience but still performs a supporting role, as in *DOOM*. Generally, however, the book portion of the menu forms only a part of the whole menu system, and is pushed further away from more active elements as a result. Ni no Kuni and Bravely Default illustrate this tendency, where the book portions of their menu systems contain largely referential elements rather than options that directly affect gameplay. When the book-based menus perform a more active role, it is often to frame player agency as a type of authorship and writing, as in *Radiant Historia* and *Planescape: Torment*. Further, the partitioning of the book-based part of the menu system from the other parts is not just about partitioning static and dynamic elements; while it does tend to differentiate it from other, more commonly used portions of the system, it also serves to mark it off from entirely nondiegetic menu options, such as general settings or saving. Consequently, these books act a fantasy prop, as something that supports the player entertaining more fictional ideas about the gameworld. While not all games utilize the book-based menu in such a manner—and an examination of how books function diegetically within a gameworld will be discussed in more detail in a moment—all four of the games discussed this far do so, representing some form of book that fictionally exists within the gameworld. Further, with the exception of The White Chronicle, all examples also include excerpts of text that fictionally exist within the gameworld as well. In his essay in the Livre et jeu vidéo special issue, Morisset asks who is being called on to read, the player or the character. By blurring the diegetic book with the book-based menu system, yet still maintaining the division between the book and the rest of the menu, a videogame can direct its attention to either side of the player-character division, as suits its designers' purpose in the moment at hand.

One final case will illustrate just how effectively the book-based menu system can be

used to disrupt a player's conventional notion of how a videogame functions, and how text functions within a videogame. In his essay "Videogames of the Oppressed," game designer Gonzalo Frasca argues that defamiliarization model championed in Augusto Boal's and Bertolt Brecht's forms of theatre could aptly be applied to videogames, to use them as a tool for social awareness. As Frasca explains, the problem with an Aristolean drama-based theory of game design (as it was represented in the early twenty-first century by Brenda Laurel and Janet Murray) is that its focus on immersion can act counter to critical thinking. The forums of Boal's Theatres of the Oppressed, on the other hand, encouraged audience participation in a debatelike manner that was not unlike the simulation of a videogame (88-9). Nearly a decade later, blogger Mike Joffe works along similar lines, investigating how videogames can be used to explore concepts of conversation and human ecology, taking up Augusto Boal's notion of a spect-actor, wherein "the audience is invited to participate not as a passive recipient of the artist's intended message, but rather as an active creator of their own message and discoveries within the space created by the artist" ("Spect-actors"). While both authors identify games that embrace some degree of this type of play, most aim at being a series of "endless shooters," as Joffe puts it, fulfilling the market's basic demands for entertainment.

Most videogames that are edging towards some type of Brechtian estrangement or Boalian spect-actor are those outside of the mainstream videogame sphere; blockbuster videogames are simply too expensive for studios to risk alienating their audience through radical experimentation. One significant exception, however, is Cavia's 2010 JRPG *Nier*, which not only moves towards this defamiliarization, but does it through its connection to game genre, violence, and its own book-based menu. It would be an understatement to say that *Nier*'s

plot is complex. In a move emphasizing the significance of epitext, much of its backstory is not contained in the actual game but in the *Grimoire Nier*, a book released in Japan to supply additional information on the game, which exists in English only through fan translation.⁷⁶ Suffice to say, the main story takes place a thousand years in the future, in the ruins of Earth, and concerns the PC Nier trying to save his daughter,⁷⁷ first from the illness known as the Black Scrawl, then later from kidnapping by the Shadowlord.

While the dynamic of father and daughter was rare (or at least rare in 2010, before the release of such high profile games as *BioShock Infinite* and *The Last of Us*), the "rescue the girl / save the world" plot is, at first glance, typical videogame fare. But this point is where Cavia's defamilizarization process begins. First, the gameplay itself is exceptionally hybrid, borrowing from other genres and some very specific subgenres. While it mainly fulfills the role of an action role-playing game—statistic-based attributes, but with the player controlling the hacking and slashing—its boss fights include creatures whose energy attacks have led critics to compare it to the "bullet-hell" shoot-em up, bringing in techniques reminiscent of *Robotron* and *Dead Nation* (Dinicola). One area subjects players to travel through a dungeon governed by an increasingly obtuse set of restrictions (one room, for example, prohibits jumping, another defending), and the characters comment themselves on how artificial the restrictions are; while such impositions are part and parcel of any number of games featuring subterranean dungeons,

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Director Taro Yoko claims in interview that this narrative vagueness was a deliberate choice: "We didn't explain everything because that's just how reality is. I wanted to reflect certain elements of reality in this game, so I didn't put too much focus on explaining everything. I also wanted to make the basic story simple and easy to understand, so I deleted most information that weren't [sic] vital to emotional impact" (*Grimoire Nier Companion*).

In Japan, two versions of *Nier* were released, with the primary difference being game system and the protagonist. The Xbox-made *NieR Gestalt* featured Nier as Yonah's father, a middle-aged man, whereas the PS3-made *NieR Replicant* featured a teenaged boy who is Yonah's brother. All North American versions feature the father Nier character rather than the brother Nier,

it ends with "a familiar moment taken from any number of Legend of Zelda games" (specifically, the close-up and musical flourish of Link gaining a new item), to make sure the player is aware just what genre conventions are being satirized (Green). In another section, the fixed camera angles of a haunted house give way to a secret government facility, capturing in miniature the thrust of the *Resident Evil* series. There is even a section of the game in which the images on the screen fade away entirely, and the player is left governing her way through a text adventure. *Nier* is not only a game that employs a variety of genres, but also one intent on making the player aware of that use, to defamiliarize her and draw her attention to the artificiality in gameplay that we have come to accept in videogames.

However, the purpose behind this defamiliarization has been a subject of debate. Nick Dinicola argues that "Nier is just weird for the sake of weird." The exception he allows is the text adventure portion, which occurs when the party is trying to enter the world of dreams to rescue a group of trapped dreamers. Unlike the rest of the game, which he maintains fails to take full advantage of its genre hopping, the text sequence matches form with function: "By leaving much of the visual world building to the player's imagination, Nier's dream world retains a sense of the intangible: It's not really there, to touch, to see; it's literally all in your head." By transitioning into a text-based display for the dream world, Nier forces the player to take a greater personal role in creating her own imaginative engagement, in more directly using what is available for a fantasy prop.

The opposing argument, that there is a purpose behind these genre subversions, is that they act to prime the player to the game's main narrative theme, the destructive power of violence. In an interview, Taro Yoko states that while his earlier game *Drakengard* pursued the

notion that violence is the result of insanity, *Nier* is based on what he sees as the message from the War on Terror in the wake of 9/11: "The vibe I was getting from society was: you don't have to be insane to kill someone. You just have to think you're right. So that's why I made *Nier* a game revolving around this concept of 'being able to kill others if you think you're right' or 'everyone believes that they're in the right'" (Clauson). Even in a first playthrough of *Nier*, the player is meant to feel some unease in Nier's acts—he and his companions shift back and forth between being blasé to gleeful about their killing of Shades, and the shadowy creatures not only contain a surprising amount of blood, but leave behind bizarrely mundane objects like stopped watches and colouring books.

About half way through the game, Yonah is kidnapped by the Shadowlord, and the genre-bending stops and the violence intensifies, with the PC going on a global quest to obtain what is needed to rescue Yonah. When the player then rescues Yonah, slays the Shadowlord, and wins the game, she is granted the option to replay, starting from this midpoint. For the next two playthroughs, the game plays out the same, but with one difference—the cutscenes are now shown from the perspective of the Shades, and the result is that the game portrays your party's actions as inhuman and monstrous—while at the same time offering no alternative to the player who wants to advance but to perform them all over again. Alois Wittwer argues that the purpose of the game's genre-bending is to cultivate in the player a distance from the game at hand, in a Brecthian manner: "Epic Theatre seeks to remind the audience that they're watching a play, arguing the audience are only capable of rational thought when they're able to emotionally distance themselves from the performance in front of them. While the mediums are different, Cavia has taken the unique tenets of Epic Theatre and re-contextualized them in a

video game." He concludes that genre-bending orients the player to look more critically at the game, and their own actions within it, including not just the violence of the characters, but of the player as well, as emphasized in the final ending.

Before turning to that ending in more detail, a brief digression is required to acknowledge how significant a role text and books play in *Nier*. The most obvious debt is in the aforementioned text adventure sequence, where text is thrust into the center stage in a way nearly unthinkable for a high profile videogame. Rule text appears in other ways as well. Yonah's Black Scrawl disease has strange runes appearing all over her body, implying that the disease is literally writing over her self. In a nod towards the book as frame, loading screens feature fragments of Yonah's diary and letters to Nier, and the player saves the game by using a mailbox, implying that Nier's progress is a series of his responses to Yonah's letters. The aforementioned paratext called *The Grimoire Nier Companion* is a mammoth compilation absolutely necessary to understating the full extent of the game's story. But the most significant incorporation of books and writing, and where it (perhaps finally) connects to book-based menu systems is in Grimoire Weiss, the sentient book that Nier binds himself to early in the game.

Weiss plays a number of roles in the game, as party member, source of deconstruction and plain destruction, and menu system. As a party member, he plays a role very reminiscent to Morte, the talking skull from *Planescape: Torment*. Whereas Morte claims to have an encyclopedic knowledge of the past, Weiss is an actual encyclopedia, and like Morte, he fulfils the role of comic relief, mocking the other characters' extremes and pointing out the game's peculiarities; when the player chooses to embark on a an optional fetch quest while the fate of

⁷⁸ Although in the conclusion, text will once again play a major role in a high profile JRPG, *Lost Odyssey*.

the world is at stake—an RPG convention players simultaneously complain about and exploit for rewards—it is invariably Weiss who mocks Nier for poor priorities. 79 As such, Weiss and his stream of scorn play a large part in the game's overall task of defamiliarizing the player to traditional game elements. At the same time, Weiss stretches across multiple categories in Mauger's set: he is the repository of Nier's magic, making him a book battery, which Mauger argues represents a reduction of the book as something to be consumed in the moment. He fulfils book as tonic, in that he gains new spells by adding "sealed verses" pages to himself, which equates book knowledge with data storage, encouraging the player to think of knowledge as something that can be acquired without active thought. And he fits the book weapon as well, as Nier uses him to channel his attack spells, and through him, can eventually attach words to magic, weapons, and martial arts, to strengthen his other actions. Weiss even engages more directly in the concept of remediation than most book representations; it is eventually revealed (mostly through the *Grimoire Nier Companion*) that he is not really a book at all, but a sophisticated piece of technology forcibly merged with the lifeforce of young children (obtained in a *Hunger Games*-esque battle royale scenario), and shaped into the form of a book. Grimoire Weiss exists at an intersection of human vitality, digital sophistication, and printed knowledge—much like text and books in videogames.

But Weiss also functions as menu system, and it is in that association that he connects most explicitly with the defamiliarization that permeates much of *Nier*. Cavia emphasizes Weiss' role by transforming the menu system after he joins to team, making certain the player is aware of how Weiss' inclusion broadens the scope of the game. In terms of what options are

And as many players note, Cavia does everything it can to discourage players from taking these sidequests, making them exceptionally paltry rewards for exceptionally tedious tasks.

available, Weiss' contents are fairly typical for a book-based menu system: his pages contain information on maps, items, quests, weapons, word edits (the aforementioned ability to affix words to abilities), and memo, which tracks status, words collected, documents found, tutorials, and fishing records. Visually, the Grimoire Weiss has two important features, speaking to permanence and contingency respectively. First, like D's Journal in *Bravely Default*, Weiss' overall visual scheme resembles the pages from a book, and changing subsections triggers a page-turning animation, furthering the sense that all aspects of the menu are part of a larger body of knowledge. Second, on individual pages, information such as section heading, items needed for weapon leveling, weapon strength, and so forth are taped onto the main book and written on what appears to be scraps of foolscap, creating the sense that Nier is adding annotation to the book as the player progresses, that the book is being updated as experiences change. Through these visual cues, *Nier* combines normally separate book as menu features, making the Grimoire Weiss seem simultaneously a body of knowledge to be consulted and an ongoing record of the player's progress.

At the final ending of the game, this book as menu system combines with the character violence to defamiliarize the typical divide between player and character. One of Nier's more bloodthirsty companions is Kainé, a fighter who was accidentally bonded to a Shade named Tyrann prior to joining the team. In this ending, Tyrann's power overwhelms them both, and Nier is forced to kill them. While Kainé lies near death, Tyrann responds to Nier's act with a choice:

Very nice. Now if you want to save your precious Kainé... there are two ways to do it.

One is to plunge your sword into her chest. That's what she wants, after all. Freedom

from burdens. Freedom from life. ... The other way is to make her a normal human being again. But for that to happen, you have to trade your own existence for hers. Well, there you go. Good luck with that.

As the conversation continues, the background fades away, until it is just Nier facing Kainé's prostrate body in an otherwise white screen. When the player moves to Kainé, she is presented with the choice to end Kainé's life, or sacrifice "your own existence." It is a rather melodramatic sort of moment, fairly typical to the genre. Should the player choose to kill Kainé, Tyrann thanks Nier on behalf of himself and Kainé and the game ends. But if the player makes the other choice, Tyrann warns Nier that this choice will make it so everyone forgets he was ever alive: "You and any sign that you ever existed will be erased." A text box appears, warning the player again that all save data will be erased if this option is chosen. And it asks again, to confirm, and again after that, warning the player that this option can only be chosen once. And then it asks one final time, "Are you really sure about this?". Then the player must input her own name, and only then the file is erased. To make sure the player appreciates the moment, that it is not just Nier performing the erasure but the player, the prompt to erase repeats itself. Even then, the erasure is no simple act. Upon selection, the game turns to the Grimoire Weiss menu screen, and slowly, every single section erases itself, leaving behind nothing but a blank page; the whole process takes over a minute, leaving the player time to contemplate the erasure in its entirety. A brief cutscene ensues, in which a confused Yonah and Kainé wonder what they are doing in the Shadowlord's tower. The end credits roll, the game reminds the player the files have been deleted, and a (mocking?) "Thanks for playing!" message quickly scrolls before returning the player to the start menu.

The erasure ending of *Nier* illustrates how fully the player comes to rely on the book menu system as a summation of her videogame playthrough, and how thoroughly the player divorces the actions of the character from the action of the player. The game demands the player to not just make the choice to save Kainé but to make it over and over again, five times in total including actually typing out the name player had to enter at the game's beginning. To Wittwer, this erasure is the culmination of Cavia's defamiliarization of violence, the final step in holding the player accountable for their actions:

You're the one who willingly submits to the game's arbitrary requirements to unlock everything while it screams at you to stop and think about what you're doing. ... But if you're capable of dismissing the violence you commit on screen, *Nier* is more than happy to treat you the same way. Oh, so all this killing doesn't mean anything? Your save file doesn't mean anything too, then. You don't need it. Video games are only frivolous entertainment, right?

In its multiple endings, *Nier* confronts the player with the possibility that the characters' violence is excessive and monstrous; in this final ending, it pushes the player to take responsibility for that action by taking away the one thing that, at any other time, is outside the story's grasp—the player's record of play. It is a final act of defamiliarization, made possible because the player is so used to the book-based menu system representing a totality of her actions; as such, the slow, drawn-out process of watching the Grimoire Weiss erase himself is the equivalent of watching dozens of hours of gameplay disappear. Cavia draws the player's attention to the traditional break between player's and character's actions by employing the tradition of the book-based menu system.

Book as In-game Object: The Site and Function of Reading in Games

The three categories of books in videogames discussed thus far—the epitext book, book as frame, the book-based menu system—all have a foot in and out of the gameworld they refer to. They are not entirely presented or apprehended as objects that exist inside a gameworld, but at the same time, they are firmly paratext, and are not designed to be experienced without that gameworld as context. The final two categories under discussion edge toward these two extremes. The in-game object book is contained entirely diegetically within a given gameworld and is meant to be regarded as a fantasy prop that functions within it; the literary allusion is a game's attempt to borrow from existing literary meanings that stand separate from it. Both appear, at a glance, to be simple remediations, where the videogame expands on the simpler medium of the book and takes its text into itself, but several examples—including the horror novel-oriented videogame Alan Wake—demonstrate the variant potential of these final book forms to complicate the relationships between media.

In his aforementioned study of the reading situation in videogames, Thomas Morisset distinguishes between books that are actually readable, and those that are just there for ornamental or functional value. Likewise, Mauger's list of metaphoric uses for books in videogames do not require the books to actually contain text. The use of such books is varied; Morisset offers the example of *Mount and Blade: Warband*, where the reading is simulated qualitatively and performed by the character but not the player, edging the player-character's experience level upwards; this use constitutes the book as tonic, in Mauger's parlance. In contrast, the archives Henton examines in *Dragon Age: Origins*, the Warden treatises, are, in

one sense, plot Macguffins, unreadable and there largely to grant the player-character an excuse to travel through Fereldan seeking assistance. Countless unreadable, inaccessible books exist across hundreds of videogames, found in piles or in libraries, used to illustrate the general idea that a storehouse of knowledge exists in a given location.

But even when a book or other written word document is readable, it is not necessarily presented in full; The Wizard's Companion in *Ni no Kuni* is a rare example of sizable book appearing in a videogame. Shane Liesegang, a game designer and writer for Bethesda's Elder Scrolls V: Skyrim, explains the reduction. Skyrim, and the Elder Scrolls series in general, capitalizes highly on its reputation of possessing a realistic, gigantic videogame world; Liesegang points out that this realism is really an illusion and instead, videogames tend to operate under "impressionist gameplay." Under this process, the designers hint at a gigantic, immersive world, and the game delivers a partial reflection of that, through "brush strokes of experience that create a loose shape for your brain to fill in," as, he argues, is the case with impressionist painting. This argument is significant in the earlier context of graphic-based realism and mimesis as make-believe; Liesegang is admitting that graphic-based realism, even for a game that goes to considerable efforts to bill itself as such, is still, ultimately, reinforced through the player's willingness to experience a partial representation as a gameworld. More significant for current concerns, his opening makes it clear that impressionist gameplay is not for graphics alone:

You enter the capital city of a province, which is inhabited by less than a hundred people. ... You're able to walk from one side to the other in about two minutes, and from its highest point, you can see clear to the other side of the province.

. . .

You take a hefty-looking book from the shelf, and find it contains only about five hundred words spanning a dozen pages.

In the course of a month or so, it's possible for you to become a world-class expert in various forms of combat, lockpicking, archery, persuasion, and calling forth flames from your hands. In the same timeframe, you can be the simultaneous leader of many separate organizations of highly trained specialists, after joining them in the lowest ranks.

Certain elements of *Skyrim* strain credulity.

In this understatement, Liesegang unites the impressionism of a graphical realism that elides distance and city size with the impressionism of a textual realism that truncates book length and a procedural realism that streamlines learning skills and rising through the ranks. Rather than text being something minimized at the expense of graphics, or books being minimized in the name of the multimedia game, these configurations work together for an overall impressionist experience.

But even if diegetic books in videogames are compressed abstractions of their out of game equivalent, there is considerable variety to be found in their expression and purpose. In *Planescape: Torment*, the amount of dialogue was restricted in part by the interface, as dialogue was generally bound by the size of the window where it appeared, and dialogue longer than a single window had to be presented differently. Likewise, the text of found object books in the game is designed around how that text is presented to the player. In the 1993 *Shining Force*, the display for books is the same as the display for dialogue, and as such, a single screen can impart about three lines of text, or an upper bound of approximately twenty words.

Consequently, rather than represent whole texts, examining a bookshelf garners the player-character a list of two titles, and the implication of many more: "Spark Level 4, Basic Training for Mages, and many more books"; "Blazing Made Easy, Freezing Made Easy, and many more books"; "How to Make Domingo Eggs, How to Hatch Domingo Eggs, and many more books." The 2000 *Wild Arms 2* uses the same sort of interface, but examining a bookshelf yields a few pages of a single book:

*You see a book entitled "The 4 Protector States." / Do you want to read it? / *Meria Boule, in the eastern part of broad Filgaia, protects the trade routes. / *Sylvaland, in the south, is blessed with fertile soil, and protects agriculture. / *Guild Galad, in the north, uses "fossils" to protect its unique industrial technology. / *To the west is Slayheim, protector of military might. / * But power that grows too strong leads a nation down the path to its own destruction. 80

Finally, in the 2014 *Dragon Age: Inquisition*, written text is presented separately from dialogue (which itself is only visible if the player chooses to turn on subtitles), and allows scrolling; the only limit is on how much text the designers decide the player will tolerate.⁸¹ The consequence is that each game offers a different interpretation and abstraction of reading. In *Shining Force*, the title-only approach conveys the sense of a character quickly darting their eyes over a bookshelf. In *Wild Arms 2*, the encounter feels more protracted, as if the character picked a book off the shelf and perused it, but only a summary of the book has been provided. And in

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The quotation marks and asterisk are in the original, with the asterisk used in game to mark text that the character is reading; the / is added to indicate a window break.

There is also some variety in text display as well; while most text is white presented on a black background, reports from the War Table are presented on a crinkled scroll—and yet still scrollable, and often accompanied with a cropped screenshot of the area they pertain to; they constitute an apt example of Bolter and Grusin's hypermediation, the new media artifact that draws attention to its ability to reconstitute older media forms.

Dragon Age:Inquisition it is further sustained, to the point where brief notes are presented in whole, and entries from longer works are presented explicitly as extracts. In each case, actual text reading of virtual books takes place, but what that reading is meant to represent differs greatly.

These differing representations have roughly the same functions: each game contains instances of books that bolster the gameworld's history, provide light comic relief, or foreshadow specific plot points. The book titles from *Shining Force* are all from bookshelves contained in Manarina, known for its school of magic; the titles, focusing on spells and magically created creatures reflect Manarina's larger role in the game—for that matter, that there is a larger than usual amount of bookshelves in the area does the same, cementing Manarina as a place of knowledge. In Wild Arms 2, the books in Telepath Tower reinforce its role as a communication beacon via the "magic" of telepathy: "Technical Communication Know-How," "Mining Empathite," and "Telepath Tower's Use." Shining Force's "Blazing Made Easy" and "Freezing Made Easy" are lightly comic, in that they suggest arcane power can be afforded from easy how-to guides. Likewise, it is a comic moment in *Dragon Age*: *Inquisition* when the player-character stumbles on the document "Plants vs. Corpses," in which an apostate fends off a demon's corpse invasion with a field of vegetables—a clear nod to the Plants vs Zombies videogame, the comedy arising from the mix between the realism of Dragon Age: Inquisition and the relative cartoonish nature of the Plants vs Zombies franchise (incidentally also demonstrating that even objects that are entirely diegetically contained within a gameworld can sustain allusive references). Finally, the books can foreshadow future encounters; in Shining Force, the books regarding Domingo Eggs signal the player to keep the

Domingo Egg she may find in Manarina for future use, and in *Wild Arms 2*, the library in Sielje has a book called "Ancient Race of Crimson Nobles," which describes the game's equivalent of vampires, foreshadowing the party crossing paths with a Crimson Noble much later. These examples can be further compared with those of the journals in *Myst*; while light on humour, they too perform dual functions of foreshadowing (in particular, showing hints for future puzzles) and expanding the gameworld (through Atreus' description of his explorations).

One difference between the in-game books of *Dragon Age: Inquisition* and the earlier Wild Arms 2 and Shining Force is that the latter always retain their spatial context; a book in Manarina or the Telepathy Tower will always be in those locations. *Dragon Age: Inquisition*'s codex, however, changes that relation. When the player-character first accesses a book, its content appears on the screen in front of her, 82 followed by a briefly appearing message in the bottom left side of the screen that the work has been added to the player's codex, the compilation of all the game lore the player has amassed. From that point on, while the graphic representation of the book remains, the text is accessible only from the menu screen. Though Henton was referring to an early game in the series, her comment that *Dragon Age: Origins* centres the player's experience as one of "assimilating, organizing and deploying knowledge" is an accurate description of how DA:I presents books and other written documents, as information to be assimilated and organized through the codex, that assimilation takes precedence over the book's original context in the gameworld. If, as Morisset claims, the location of reading plays a large part in how reading is experienced, DA:I calls for a reading detached from place. Further, in doing so, it caters to the narrative of graphical realism at the

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Although, in an example of how technology relates to text, there is no guarantee the player will be able to read it; as with other Bioware games, the console version of *DA:I* is designed for HDTVs, and playing it on a non-HD television makes the text exceptionally difficult to read, as many player complaints attest.

expense of text, as the books are stripped from locations as they are examined, whereas the graphic representations stay in place.

Books as Allusive Structure: The Horror of Alan Wake

Such an interpretation of the relation between books and new media is at odds with Striphas' intermediation of books, that books exist alongside other media forms that co-exist rather than supplant. Striphas' view finds full expression, instead, in the final type of book representation in videogames, allusive structures. This category refers to the process in which videogames allusively draw on references to books that exist outside of the gameworld at hand. The reach of this category is potentially quite extensive; videogames can be direct adaptations of novels (*Dante's Inferno*; the 1985 DOS *Wizard of Oz* text adventure, the 2014 app 80 Days, which is an interactive gamebook based on Verne's novel, among countless examples), and a fair case can be made that science fiction and fantasy based videogames rely heavily on plots and tropes originally established in literary forms, such as rescuing princesses from dragons or being under siege by alien monsters on distant planets. In these cases, gaming capital, the reputation of a player within a gaming community gained through consumption and discussion of videogames, becomes intermixed with cultural capital in general, as the videogames call on the player to recognize references to material that may not even exist within the gameworld at hand.

Of course, the allusions do not have to overlap so heavily with the game; it is entirely possible, and, in fact, frequent, that videogames make only glancing reference to characters and locations found in works of literature (or, for that matter, other media forms), and through this slight invocation, imply how the player is meant to interpret the gameworld, albeit often in a rather remote way. *Skyrim*'s High Hrothgar, the monastic temple where the ancient Greybeard order reside, has nothing explicitly in common with the character from *Beowulf*, but establishes

a thematic link between the game's and novel's respective dragon-slaying Nords (Hughes). *Magical Diary*, a game in which the player takes on the role of a teenage girl in a school of wizards, has the default name of "Mary Sue," a term which refers to a tendency in fan fiction towards author insertion or the insertion of author-created ideal characters (Verba 14); in the context of the game, it functions as a tongue-in-cheek way of encouraging the player to consider her play as her own idealized fanfic. Both of these games frame existing literary works as paratexts, but not in such a way that knowledge of the original context is necessary for the game at hand.

In making these allusions, videogames set in the future or present have an advantage of sorts over games set in a fantasy world or in the past. As books and the written word are commonly regarded as the only means of communication in a pseudo-medieval setting (regardless of whether or not such sparsity has a basis in historic reality), books are often the only medium (with the possible exception of song) that can be easily established in a diegetic manner. As a result, the written word is easily overused in such games as a means of communication; the books in *Dragon Age: Inquisition*, for example, are found littering street corners, obscure dungeons and far-flung vistas to such a saturation as to require a willing blind eye on the player's part. Likewise, a fantasy realm with no connection to our world is limited by exactly how much allusion it can incorporate without damaging the illusion of its independence. A game set in the present or future has no such limitation, and is free to not just draw more explicitly on literary works, but also on other media forms; hence the *Mass Effect* series including both a recitation of William Earnest Henley's "Invictu," and an impromptu parody of *The Pirate of Penzance*'s "Major-General's Song."

Often, the allusive structure of a game—the constellation of allusions and cultural references created by the sum of direct or indirect allusions—is simply a reflection of the tools the designers had at hand, and work with the overall game to sustain its intended mood and atmosphere. Remedy's 2010 Xbox 360 exclusive release Alan Wake goes beyond that, demonstrating the allusive and intermedial options available in representing books and book culture when the game has a contemporary setting; it is a game "not only deeply invested in telling a story, but exploring how stories are told across media as well as notions of artistic influence, authorship, and reality versus imagination" (Gonzales). In terms of larger game industry, Alan Wake is a AAA release that has met with a mixed reception. While the long-tail sales have not been sufficient to prompt Remedy into announcing a sequel, as was originally implied, they have been strong enough to elevate the game to "cult classic" status, and to promote the release of various related DLC and spin-offs that---in a move that suggests Remedy's intermediation approach—the staff refers to in interviews as being part of *Alan* Wake's "first season," a terminology borrowed from television (Hakkinen). Despite that cult hit status, original sales performance was poor—speculation for the blame has been placed on the game's unusually long five year development cycle dulling fan interest; its release on the same day as the release of the much more popular *Red Dead Redemption* by Naughty Dog, overshadowing it for the larger public; and a highly publicized early switch away from an open world game, which disappointed some fans (Sakey).

Reportedly, that switch was a result of a change in what the developers wanted from the game, and again, the developers' statement on the subject is indicative of transmedia awareness. In interviews, managing director Matias Myllyrinne casts the difference in

cinematic terms: "I think the biggest issue with combining a thriller with a sandbox is, for a thriller, you want a heart-pounding thrill ride. You want to control the pacing. ... You show the knife on the table, the camera pans away, the knife's gone. You know, that kind of Alfred Hitchcock thriller moment" (Myllyrinne). As this quotation suggests, Remedy staff prefer referring to *Alan Wake* as a psychological thriller rather than as a horror game, ⁸³ but a quick description of its basic plot and gameplay belies a heavy horror influence: famous horror writer Alan Wake, afflicted with writer's block, follows his wife Alice's advice and books them a stay at the island cabin on Cauldron Lake, by the small town of Bright Falls. After an argument, Alice is taken by a mysterious force and Alan is knocked unconscious; he wakes up a week later, Alice is gone, and Alan is being pursued by strange, shadowy creatures who can only be harmed through concentrated light, usually deployed by the player's flashlight. Eventually, it comes to light (pun intended), that the area is infested by an entity called the Dark Presence, which arranged for Alice to be kidnapped so that it could force Alan—as it had forced previous creative individuals—into writing it into a more direct manifestation through the written word.

Like *Myst*, then, *Alan Wake* is a videogame based around the idea that the written word can act as a force of creation. And also like *Myst*, *Alan Wake* involves using a book as a portal; the difference is that *Alan Wake* employs the notion on a more meta level, implying that at some point, Alan and Alice Wake (and possibly the entire population of Bright Falls) entered a written story—and not just any story, but *Departure*, Alan's unfinished novel. Throughout the course of the game, the player finds pages of the manuscript lying around, and their text fulfils

Tanya Krzywinska has persuasively argued that *Alan Wake* is American Gothic horror, in that "The story arcs around the enigmatic proposition that the nightmare that Wake experiences seems to be based on a book he has written, but the contents of which he has forgotten, thus vocalising a classic Gothic dream-logic scenario where temporal order and agency become dis-ordered" (299).

the in-game functions of furthering the mystery and foreshadowing events about to happen. The full extent of exactly how self-referential these manuscripts can be is illustrated in the one FBI Agent Nightingale reads just prior to a scene where he is captured by the Dark Presence: "[Nightingale] had seen this moment before, read it in the page. He was transfixed by the déjá vu and the horror that he was a character in a story someone had written. Then the monstrous presence burst in behind him and dragged him into the night." In another level of metatextual questioning, Alan himself appears as a character in pages the player finds by another author, Thomas Zane, describing events from Alan's childhood. Near the end of the game, the emphasis on text has inserted itself overtly into the gameplay as Alan realizes he is inhabiting his unfinished novel rather than the novel reflecting his present life. Objects disappear, replaced by their word equivalent, and require the player to shine sustained light on them to be transformed from word into what object the word represents. In a way similar to Nier, Alan Wake lays bare the method through which diegetically placed books foreshadow game events; the goal here is less to lead the player to becoming a "spect-actor" and more to inspire terror and general unease through the consequent defamiliarization. This textual focus turns the player to the game's final twist, wherein Alan realizes the only way to save Alice and the others is to write them free. Text, and the act of writing, become the creative force that brings about salvation.

While emphasizing the written word and glorifying the role of the author, *Alan Wake* also presents books as one media form among many, through its numerous allusions, and through its use of epitext and peritext media. The literary allusions are frequent; Nightingale sarcastically refers to Wake as a series of other fiction writers, including Stephen King, H. P.

Lovecraft, James Joyce, Mickey Spillane, Raymond Chandler, and others, and the game begins with Alan quoting Stephen King's claim that "Nightmares exist outside of logic, and there's little fun to be had in explanations; they're antithetical to the poetry of fear" (perhaps establishing from the start that players should not look too closely at plot holes and fine details). But at the same time, the player's attention is drawn to other media: the local radio station plays on most of the radios Wake comes across, depicting the town's response to Alan's presence and the Dark Presence; many television sets depict episodes of "Night Springs," a show clearly based on the Twilight Zone; it is implied that the Dark Presence has tried to break through before, using painter Rudolf Lane and the rock band Old Gods of Asgard. And while the game makes explicit through allusion its literary debt to Stephen King and other horror writers, critics have noted its other cultural credit to film—such as Hitchcock, as noted in the interview quotation above, but also the film Secret Window (Fuchs "Hauntings" 67)—and television—such as The Twilight Zone, and in its small town with eccentric characters and hidden secrets, the cult hit Twin Peaks (Krzywinska 298).

In terms of epitext, Remedy embraced a transmedia model, creating *Bright Falls*, a six episode live-action web series, running just over a half hour in total, that was released at the same time as *Alan Wake*. It is explicitly an epitext, rather than a work in its own right; as its director describes, it is a prequel to the game, and while it produces a "satisfying experience" on its own, it does not present a close-ended story (Van). As Michael Fuchs relates, the series stars not Wake but a reporter Jake Fischer, and furthers the game's focus on multimedia and (though not as closely) self-reflexivity ("'My Name is Alan Wake'"). The result is that "when playing *Alan Wake*, gamers just as much use the analog controller in their hands to play the

game as they cognitively play with the meaning potential that the narrative opens up, gaining as much pleasure from playing the game as from playing with the complex game text" (Fuchs). In terms of mimesis as make-believe, the game presents the players with multiple props, constituted by a constellation of media, in which to construct the playworld, including the numerous literary references, the game's own novelization, and the webseries. Alan Wake's occupation as an author and the metatextual manuscripts found within the game make books and writing the primary prop in the playworld the player may construct, but the overall allusive structure and paratexts make it clear that it is first among equals.

Text's marginalization in the face of videogame graphics is not just parallel to the book's marginalization in the face of new media: they are both symptoms of the same oversimplification that presents media history as a progression that leaves dead forms in its wake, rather than variants. Representations of the book within videogames fit, on a surface level, with this marginalization, used as support, as period setting, as fixed record of the player's knowledge assimilation. But this too is an oversimplification, as a variantological look instead reveals the richness available in such representations. Books associated with videogames can act simultaneously as commodity objects and playing prop, as with the epitext/peritext of *Ni no Kuni*'s Wizard's Companion. They can frame the entirety of a game in a way that questions how history is formed, as in *Final Fantasy Tactics*, or provide an estrangement of the role of player and character, as in *Nier*. A book can be marginalized and minimized, a representation to be assimilated into a larger, decontextualized codex, as in *Dragon Age: Inquisition*. Or, as in *Alan Wake*, it can appear as a part of constellation of media forms, and champion text as the very bedrock of creation.

Conclusion

Recent developments in the videogame industry add new complications to text's place within it. The continuing development of the Oculus Rift and its virtual reality head-mounted display raise graphical realism to a new pinnacle, furthering its lockstep with the forefront of technological innovation. At the same time, however, the immense popularity of mobile gaming has illustrated that graphical realism does not have to be videogame's driving force. Graphical realism's loss does not necessarily have to be text's gain; there are certainly a surplus of popular mobile games that simply continue the usual graphic-text relationship from console games, with a focus on more cartoonish, abstract graphics, such as *Plants vs Zombies*, or *Candy* Crush Saga. At the same time, there are many text-centric games as well that are receiving notice, including—to return to a theme of the last chapter—those that return to already established forms and media, especially the book: Craig Smith's Frotz, which ports many older text adventure games over to the iPhone; Tin Man Games, who have adapted pen and paper gamebooks from the 1980s and 90s Fighting Fantasy series into digital form; and inkle textbased adaptations of classic texts, Frankenstein by Dave Morris, and 80 Days by Meg Jayanth and Profile Books.

In short, there is much more yet to be gleaned through a focus on text in videogames.

Before I turn to a brief summary of the dissertation as a whole, I wish to briefly sketch out four future variants that are ripe for study. These works were not included in the main body of the dissertation not because they were deemed insufficient for lengthy exploration, but simply that the exploration would not have fit neatly with established chapters and arguments.

5th Cell released Scribblenauts (with the tagline "Write Anything. Solve Everything") in

2009 for the Nintendo DS. The game's main mechanic is arguably a variation of that in the studio's earlier DS game, the 2007 Drawn to Life, which showcased the DS stylus by having players draw characters, objects, and accessories directly into the game. The Scribblenauts series continues that emphasis on creation, but shifts the creative force from drawing to writing: the player types nouns into the game's keyboard, and (provided the word is the game's database) it appears for in-game use by the game's player-character, Maxwell, who uses them to solve the game's puzzles and collect "Starites." The game is generally directed at a younger audience, and challenges them to expand their vocabulary: Puzzle 1-4, for example, must be completed three times in order to get all Starites, which means the player will have to name nine different farm animals to succeed. Scribblenauts is thus an game worth investigating on a level of semiotics, as it suggests a certain equivalence between signifier (word) and signified (image)--though it also may, going back to Chapter 3 and Aristotle, suggest that the word is the abstract ideal, and the image its substantiation. It is also an interesting game to look at in terms of what text games can offer on an educational level, as even just the open, objective-less play challenges players to test the game system with as many obscure words as they can come up with. On this level, Scribblenauts shares something in common with games such as Myst and Alan Wake, in that the act of writing is imbued with a creative, magical power.

Later games in the series—Super Scribblenauts (2010), Scribblenauts Remix (2011), Scribblenauts Unlimited (2012)—extend the first game's original formula, adding the ability to create adjective attributes for the nouns and, in the final case, adding a more extensive storyline. The adjectives allow the player freer rein to investigate the game's absurdities, seeing, for example, how a plastic Dracula may fare against a flying zombie Abraham Lincoln.

The fifth game in the franchise, however, *Scribblenauts Unmasked: A DC Comics Adventure* (2013), takes the series in a different direction. As the subtitle suggests, the game allows characters from the DC Comics universe, from Superman and Batman to the downright obscure like Captain Carrot, and the storyline sees Maxwell and his sister teaming up with various DC heroes to fight comic book supervillains. The game still challenges players to build a mental wordbank of possibilities, but now that wordbank is at least partially filled with commercially viable Warner Bros. properties; like another videogame series aimed at a child audience and starring a wide variety of superheroes, *LEGO Batman*, the game is arguably now less creative and more commercial, as the player must consider less which synonym fits a given situation and more what superhero.

Scribblenauts Unmasked deliberately calls on the player to cultivate such knowledge, as some of the achievements for the PC version include creating alternate reality versions of popular Justice League heroes and creating 150 different Green Lanterns, a task that almost certainly will force the player to make extensive use of the in-game database nestled inside the Batcomputer. Through Walter Benjamin's writing on collecting in a modern age and the videogame Katamari Damacy, Steven E. Jones argues that "Just to play is to collect and, at the same time, is to perform collecting in a self-conscious arena of cartoonlike representation, is thus to parody collecting in today's culture, procedurally as much as semiotically" (63). I would speculate that the Scribblenauts series, and Scribblenauts Unmasked in particular, exemplify such activity, calling on the player to construct a mental collection of suitable or suitably absurd nouns that the player may apply as she sees fit. The Scribblenauts series illustrates how a graphic-based game may orient itself around a text-based mechanic.

To move back to the realm of mainstream, AAA videogames with massive releases and massive budgets, the 2007 Mistwalker and feelplus-developed Xbox 360 game Lost Odyssey is, in most ways, a conventional Japanese role-playing game (JRPG): it consists of turn-based combat, a party composed of eccentric characters, lavish cutsenes, and a sprawling gameworld revealed slowly to the player. Even the plot is well-visited videogame territory and not unfamiliar to this dissertation: ala *Planescape: Torment*, the player-character is Kaim, an immortal amnesiac who is one thousand years old but, at the start of the game, has no memory of his long past. Where the game most deviates from the norm is in its presentation of Kaim's memories. Triggered by events within the game--a discussion overheard at a bar, for example, or coming across a happy family in the street--they consist of Kaim's (and occasionally, other party members') past, told as a text short story, with the only "pure" images being the backgrounds the text appears on. Collectively called "A Thousand Years of Dreams," the thirtyfour short stories were written by award-winning short story writer Kiyoshi Shigematsu and translated by academic Jay Rubin for the North American release (Fear). These stories are slow, melancholy, and deeply philosophical, often to a degree at odds with the rest of the game. Further, the game accentuates the stories' role as paratext by bracketing them off from the rest of the game; they are optionally accessible when Kaim first unlocks them, when the playercharacters rest at an inn, or from a menu at the game's title screens, and they generally contain characters and locations not present in the rest of the game, both signs that the stories should be viewed as segmented from the game "proper."

From a text standpoint, perhaps the most significant thing about *Lost Odyssey*'s memory stories is that their use of text deviates from the videogame norm. For example, while most of

the in-game books featured in the previous chapter, their text is either static or progresses as a generally constant rate, whereas in the text's nature as a digital, animated image is brought to the forefront in its presentation. Whole paragraphs can appear in seconds, with single words missing that reveal themselves slowly, in order to accentuate their presence. For other words, the letters tumble into place from above, or dance around the screen as if blown by a wind before falling into place. These are not complicated techniques; this kinetic typography would not be out of place in the opening credits of films, or even in an instalment of the animated series Winnie the Pooh. However, while such effects do occur in videogames, it is rare that it is done in such a way as to draw the player's attention, and is also rare in the Western tradition of short stories.⁸⁴ The content of the stories, ruminations on the nature of war, the purpose of religion, and the value of freedom, among many others, are rife with potential for further study in terms of their contribution to text's prominence in videogames, as is the way the title of the collective short stories--"A Thousand Years of Dreaming"--blurs the boundaries between stories, dreams, and memories. Lost Odyssey illustrates how text-heavy segments can function in games intended for a mainstream (or at least a portion of the mainstream) audience.

The last two games I wish to highlight dwell far from the realm of "mainstream" games, and even from the "indie" label that games such as *Scribblenauts* typically enjoy. Arguably, it is that status, and their use of text that allow them to address topics less easily accessed in mainstream, image-centric videogames: marginalized sexuality, feminine-gendered experiences, and mundane activities outside the purview of epic questing that characterizes many videogames. Designer Anna Anthropy has created a variety of different games, perhaps the best known being *dys4ia*, a game which illustrates Anthropy's experience as a transgender

⁸⁴ In Japan, the techniques are slightly more common, given the greater presence of the visual novel genre.

woman undergoing hormone replacement therapy. In contrast, the text-based *And the Robot Horse You Rode In On* is a much less grounded story, in which the player takes up a role as one half of a pair of science-fiction lesbian crime partners, scheming to cheat your partner and lover out of her share of a big score. The game is technically simple, consisting largely of screens of text and hyperlinks, but its themes are complex, drawing on conventions from western stories, general science fiction, steampunk, sadomasochistic erotica, and pulp lesbian fiction.

The game serves as an entry point to a larger discussion about platform and game community as represented by the program Twine. Originally released in 2009 by Chris Klimas, Twine has been embraced as a means for creating text-based, hyperlinked games that can be distributed online. Anthropy has not only used Twine extensively in her own work, but has been active in promoting Twine as a tool for others, authoring a tutorial for Twine on her website ("HOW TO MAKE GAMES WITH TWINE"). Twine's virtues—its accessibility, its free availability, and its easy distribution—fit well with Anthropy's larger philosophy, as described in her book, *Rise of the Videogame Zinesters*:

What videogames need right now is to grow up. The videogame industry has spent millions upon millions of dollars to develop more visually impressive ways for a space marine to kill a monster. What they've invested almost nothing in is finding better ways to tell a story, and in exploring different stories to tell. ... Every game that you and I make right now—every five-minute story, every weird experiment, every dinky little game about the experience of putting down your dog—makes the boundaries of our art form (and it is ours) larger. Every new game is a voice in the darkness. (160)

The text-based Twine, for Anthropy and others, allows for the creation of games that fall

outside of the accepted norms of what constitutes a game. This deviation has led some to argue that Twine's focus on games with minimized player agency, on games without clear goals or rules, or—as is particularly relevant for my consideration—on games that favour descriptive text over immersive graphics, means that its products are not truly games at all. Designer Robert Yang, speaking about personal games in general, critiques this view: "That line of inquiry has been a long favored tool of well-intentioned oppression, because these arguments often masquerade as thoughtful discourse but function as a weapon of de-legitimization, that argue that these personal games can't really fit a formal definition of game" ("A letter to a letter"). In this way, Twine games in general and *And The Robot Horse You Rode In On* in particular represent a type of text game that pushes the boundary of what is typically considered a game, and the marginalization that often occur around the expression of those voices.

Like Anthropy, Emily Short has long been a game developer interested in text-based games. Short has an extensive history with interactive fiction in particular. *Counterfeit Monkey:* A Game of Word Manipulation follows in the tradition of Infocom, as, in a manner similar to A Mind Forever Voyaging, it takes place in a totalitarian, almost dystopian society, ruled by the controlling Bureau of Orthography that rigidly controls the linguistic expression. However, it also boasts a heavy similarity to the pun-centric Nord and Bert Couldn't Make Head or Tail of It, as the player-character's chief weapon is the "full-alphabet letter remover," which can manipulate reality through wordplay: using the device to take the k from the titular Counterfeit Monkey, for example, turns it into Counterfeit Money. Another game, Galatea, is essentially a conversation generator in the vein of the psychological tool ELIZA but based on ancient Greek

myth, wherein the player-character has an extended conversation with a statue-turned-woman. In the process, it turns the player towards a variety of subjects, including gendering that frequently occurs in art and technology.

Another of Short's games, and the final game of the four I wish to focus on, is BEE: A story about work and spelling. Made through the platform Varytale, BEE places the player in a role exceptionally unusual for a videogame: you play a homeschooled pre-teen girl, whose parents have raised her in a religious setting and encouraged her participation in competitive spelling. The game is essentially a time management simulator, in which the player must decide exactly how to spend her time, whether it be studying for the next contest, pursuing other studies, or questioning her parents' choices in child-rearing. As another deviation from most videogames, BEE inverts the typical goal orientation. From its initial entry, it explicitly tells the player that the apparent goal, winning the national spelling bee, is out of reach: "Sooner or later you're going to lose." It is left up to the player, then, to determine what constitutes a satisfactory playthrough and ending. Like the Infocom game Bureaucracy, Bee is a text-based game about experiencing the mundane, but where Bureaucracy was a madcap satire, BEE takes its setting seriously, joining the protagonist's fascination with words to her everyday life in an impoverished religious, but caring, family. BEE demonstrates how text, through a focus on words, can speak to subjects that mainstream, graphic-based games often deem commercially unviable, and thus not worth contemplating.

For the most part, though they are variants that depart from the mainstream of the game industry, most of the videogames considered in the dissertation adhere rather strictly to conventional notions of what constitutes a videogame, or a game in general. In future work,

such as the games described above, I want to investigate text-relevant games that push at those boundaries and challenge our conception of what a videogame may be. In particular, *And the Horse You Rode In On* and *BEE* break away from elements such as clearly defined rules and objectives. It is my conjecture that their text-based nature contributes to that separation, allowing them to address their subjects in ways that establish new norms and approaches to what games can be. Each of these four games presents a different way that text can be approached from within the medium of the videogame. Each is a variant that, hopefully, I will one day be able to pursue in greater detail.

Through the course of this dissertation, I have pursued five different approaches to how text can influence the course of the videogame. These approaches can, I hope, be apprehended both separately and as a whole to form a foundation for studying the contribution of text to videogames, an area of study which has so far been neglected in game studies at large, except tangentially through the study of games as text in a more bibliographic sense (Whalen, Krzywinska and Atkins) or the connection between new media and literature (Ensslin, *Literary Gaming*; Sezen). The approaches presented here are not offered in the spirit of opposition against an image-based narrative of videogame history, as my goal is not to replace one dominant narrative of history with another. Rather, they are offered as alternatives that may and indeed have existed alongside the hyper-realism of AAA videogame releases, sometimes pushing back against graphical realism, sometimes working as its support, and sometimes going off in a different direction entirely.

As chapter 1 detailed, videogame instructions can be dated back to the dawn of the arcade, and instruction manual to the dawn of the console videogame system. From the Atari

2600 to the mid-2000s, the manuals reflect, through text description and image-based screenshots and artists' renderings, the technological and cultural changes in their respective machines. Atari 2600 manuals illustrate a shift from arcade-style design to complex gameworlds; SNES manuals demonstrate further complexity, as distinct game genres solidify and their manuals contain correspondingly different information. Manuals illustrate the cultural significance, the gaming capital, associated with their respective platforms—the black and white form of the sleek Sega Genesis manuals, the comparatively massive size of the computer game manuals, and manuals trumpeting new innovations such as a 3D controllable camera or online connected play. While it is common now to view instruction manuals as a medium rendered obsolete or marginalized by technology that allows user-authored walkthroughs or ingame tutorials, their role as paratexts that frame their respective gameworld allows us to view their image-text combinations as more than just dead forms. As paratexts, they can draw on the pre-established forms of comic books or picture books, establish the authority of the designers, or function as objects that exist within the videogame they describe. The first chapter thus set up a history of videogames and deviations from that history, by illustrating how concerns of image and text regarding a videogame extend outside of the game itself.

The second chapter narrowed the historic focus, through an investigation of the 1980s and the split between text-based and image-based games grounded largely by the design of the hardware that ran them and the market their designers hoped to cultivate. Like the typographists of the early 20th century, the designers of the 80s attempted to fuse work and play with their experimental games, but within the stricter confines of existing economic, cultural, and technological systems. Consequently, Nintendo, while not creating an entirely new image-

based vocabulary whole-cloth, certainly refined how image-centered gaming could teach its players, as evidenced through the progression of skill required in the *Super Mario Bros*. series, training a player culture familiar with videogames from the arcade and the television. At the same time, Infocom's text-based games came out of a tradition of *Dungeons & Dragons* and university computer networks, and attempted to embrace the literary and verbal aspects of games such as *Nord and Bert Couldn't Make Head nor Tail of It* and *A Mind Forever Voyaging*. In terms of image and text, then, the 80s are characterized by a rough division, where technology, culture, and economics surrounding the computer and home game consoles encouraged such a division.

Eventually, computer technology removed the gap (or at least brought computer games to parity, graphic-wise, with console games) and mixed graphic and text games become common, if usually slanted in favor of text. What makes Cinemaware's *It Came From the Desert* so interesting as an image-text variant is that not only does its 1989 release date on the Commodore Amiga make it one of the earlier games to successfully combine image and text, it does so by taking longstanding medium forms and transferring their logic to the videogame. To wit, *Desert* takes not from the tropes of the horror game genre (which are still unformed in 1989) but from longstanding fears regarding the vividness of the image and the interior/exterior dichotomies and tropes of authority employed by 1950s horror films. The monstrous giant ants are the physical horror standing in for the psychological terror of the game's ticking clock; the text becomes the means for the player to enter into a relationship with the game through asserting scientific authority and mastering the phone-based communication. As chapter 2 shows, in a period in game design where the balance is shifting towards image, *It Came From*

the Desert is a useful example of how text and image can be combined in patterns other than dominance and marginalization.

Unlike many of the other games I examine in detail, Myst and DOOM themselves do not really fit into a variantology model—while *Myst*'s future influence is debatable, both are prime examples of a shift in the game industry, to a point where computer technology and graphical realism rise to the forefront as driving forces. Instead, chapter 3 featured a variantological approach to them, through examining how text works to support each, and how each depends on different models of mimesis beyond graphical realism as part of its appeal. Part of that study meant exploring traditional, literary concepts of mimesis, from Plato's contention that fiction was imitation and deception to Auerbach's interpretation of Western literature in terms of a progression of models for realism. Likewise, videogame scholars have developed their own forms, which can work with or against graphical realism: mimetic interfaces, functional realism, and simulation. Myst goes to great lengths to draw the player's attention to its graphical realism, but its puzzles rely on mimesis as imitation, and its gameworld relies on text accounts and the implied power of authorship. DOOM's legacy is as the prototype of the first person shooter, which comes from its visual perspective and fastpaced 3D environments, but its cultural connections and indeed, the entirety of play, is always filtered through a textual overlay. Chapter 3 illustrates that while text in both games function to support the appearance of graphical realism, a closer study reveals that in even in these landmarks of graphical realism, other forces are at work.

If chapter 3 was about the limits of graphical realism, then chapter four is a potential solution, in the form of Kendall Walton's theory of mimesis as make-believe. It presented a

form of mimesis not bound to the graphical capabilities of game hardware, but to the relationships between players and games. In that light, *Planescape: Torment* is a game worth investigating on two fronts—it is a text-heavy game in an era where emphasizing text was (to the developers' chagrin) not a popular stance, and its plot's approach to belief make it an easy accompaniment to mimesis as make-believe. By going into such detail over all the different ways text influences the game, it becomes clear just how many options regarding text (and combinations of text and image) are available. The title screen deploys text in an unusual fashion to orient—perhaps dis-orient—the players to the game's many subversions; tattoos of text and image inscribe memories on the player-character's body. The many, many variations on text and colored font on screen, in spoken word, and in text dialogue serve both diegetically and nondiegetically to help the player filter information about the game, Sigil, and the larger gameworld. Written journals propel the PC onward, culminating in complex verbal figures such as the riddle and the name. Throughout it all, the game provides props, tools emphasizing the power of belief to help the player assemble her own ideal playthrough, her own playworld of make-believe. Planescape: Torment is a variant for its focus on text, but chapter 4 demonstrates through it the potential for make-believe as a tool of videogame interpretation.

In the final chapter, I investigated text in videogames from a different angle, considering how the book—the medium long held as the epitome of text in Western culture—is portrayed within videogames. What I expected to find was that, similar to the way the book and new media are set in opposition in popular discourse, the book would be used as "old media," to serve as grounds for the videogame's remediation, as Bolter and Grusin describe for *Myst*. Instead, what I found was multiple variations, even within the categories I created. *Ni No*

Kuni's Wizard Companion illustrates what is at stake in how a book is portrayed within a videogame, as its state as either epitext or peritext led to very different games. Shining Force shows the basic case of the book as frame, where the book is grounds that the play emerges from, but Final Fantasy Tactics shows how that form can be complicated, as its book frame can push the player to question the narrative as presented, and her relation to it. For the book as menu, Planescape: Torment's journal is constantly reinforced and brought to the player's mind, shaping future decisions, whereas Ni No Kuni's Wizard Companion, in its digital incarnation, is frequently a repository of where she has been; in Nier, it serves as the pinnacle of the game's inversion, its visual erasure marking the end to all traces of the player's existence. In-game books, from Shining Force to Wild Arms II to Dragon Age: Inquisition, can be depicted in a great variety of manners, each with their own implication of what it means to read and process information. Finally, the metatextual allusive structure of Alan Wake affirms writing as an act of creation and power, but in such a way that it is placed within a constellation of other media. The many uses of the book within videogames uncovered in chapter 5 confirms the versatility of text.

As I have said, these five chapters do not constitute a complete history of text in videogames. Not only do I believe such a history impossible, its pursuit would run counter to spirit of inquiry with which I have undertaken this project, imposing a singular, continuous history where a multitude exist. Rather, my work here is a foundation—not one to be rested on and taken for granted, but as a source of inspiration for new questions and new founts of inquiry.

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